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ORIGINAL ESSAYS AND CASES.

ART. I.—*Notes on a case of Cellular Inflammation.*

By DANIEL DRAKE, M. D.

THE general affection of the nervous and sanguiferous systems, denominated Fever, it is well known, frequently excites Inflammation in particular organs. These secondary local affections, in most cases, arise during the violence of the fever; and much oftener, perhaps, than the primary topical impression, lead to a fatal result. A less formidable class of these consequential disorders, present themselves in the *decline* of certain cases of autumnal fever; and, are regarded, when they occur in the extremities or external parts, as salutary;—but they are the *signs* merely, not the *causes* of a favourable termination. The 'fever-leg,' 'fever-sores,' boils, and abscesses, are examples of this kind. When these inflammations appear, the patient is generally regarded as safe; though some of them, especially the first, may continue to afflict him for months and even years. After one of these *sequelæ minores* manifests itself, the patient, already much exhausted, by the previous fever, is apt to experience a tedious convalescence, with unusual irritability; and when extensive and copious suppuration occurs, he sometimes sinks under the discharge. Of these modes of termination, the most desirable is the furunculus or boil, and next to it the abscess. Of the last, I recently had an opportunity of witnessing, in part, the progress of a case which presented some circumstances, that seem not unworthy of being noted. As no

record of the symptoms and treatment was kept, I shall not attempt a regular history.

Near the close of September, I was requested by Dr. Lawrence, of this city, to visit, with him, a patient, Mr. Trimble, aged about 22 years. The account given me by the Doctor, was, that his patient, an engineer, nearly three weeks before, had been seized with a double tertian, presenting the characters of a remittent, with the alternate paroxysms more violent. The treatment adapted to such a case had been pursued, till the patient, after twelve or fourteen days, was so far restored, as to walk about his room, and eat with a keen relish. His feelings, passions and appetites, however, were more uncontroulable, than in favourable convalescence; and after an improper indulgence, in an article of diet, not very digestible, but in no degree stimulating, he experienced a disturbed and feverish night. Next morning he complained of some difficulty in swallowing, and of pain and fullness, near the angle of the lower jaw on the right side. On examination, the Doctor discovered an external swelling in that part, which increased rapidly, and spread in all directions with the celerity of an erysipelas. At the same time the bowels of the patient became torpid, but not distended; his pulse frequent and irritable; his feet cold, and considerable hemorrhage from his nose took place.

When I first saw him the swelling had extended backward, so far as to involve the ear and mastoid process; downward, below the level of the pomum adami; forward, to the angle of the mouth; and upward to the orbit. It finally reached the forehead; advanced to the median line of the face, and sunk quite to the clavicle. The skin was tense, insensible, and of a dark red; but the inflammation evidently lay beneath, extensively diffused through the cellular substance of the face and neck.

Subsequently, many other abscesses formed in various parts of the body; of which the principal were, one on the anterior part of the right leg, two on the left forearm, one over the dorsum of the left scapula, and one about the cartilages of the fifth and sixth ribs of the same side, near the sternum. The

first was opened, but the patient died with the others entire, and the skin above them unaltered in colour. That, in the region of the heart, was remarkable for a strong pulsation, corresponding with that of the organ beneath; and upon the death of the patient, it entirely disappeared, so that even the spot where it had existed, was not indicated by its vestiges.

In my first visit, on referring to the protracted illness through which the patient had just passed; to the existing constitutional symptoms; to the epistaxis, and to the condition of the integuments over the principal swelling, I was apprehensive of extensive sloughing, unless the powers of the system generally, as well as of the affected part, were sustained; and, accordingly, advised the internal use of a decoction of cinchona, alternately with the liquor carbon. ammon. and, in imitation of M. Bretonneau, a tight bandage, over the entire swelling. My suggestion being adopted, I proceeded to apply a roller, having, previously, covered the surface with a linen compress moistened with tepid vinegar. The application was at length effected (though not without difficulty) in such manner, as to produce firm and tolerably equal pressure, and the patient left under the internal use of the medicines just mentioned.

On my next visit, I found that the patient had become delirious, and torn the roller from his face and head. The inflammation had extended; the tumefaction increased; and the common carotid of the affected side, was beating with a volume, energy and hardness, that formed a striking contrast with the other. Of course, a method of treatment, so obviously inapplicable, was abandoned, with an immediate resort to another, based upon sounder views.

Nearly sixteen ounces of blood were drawn, from the anterior branch of the temporal artery of the affected side; a tepid solution of acetis plumbi in vinegar, ordered to the surface of the swelling, and a cathartic administered. Next day the patient was no better. We then resorted to an incision, as advised by Mr. Hutchinson. The bistoury was introduced below the middle of the cheek, and carried upwards for more than an inch. When the instrument penetrated the skin, it

was not felt by the patient; and after passing that part, it met with no resistance, till it had plunged nearly an inch, in depth. To my hand it seemed to have entered the cavity of an abscess, but no pus, and very little blood followed its withdrawal. Subsequently, several other incisions and deep punctures, were made nearer to, and about the angle of the jaw; but the quantity of matter which issued from any of them, at the time, was small; and their effect in arresting the inflammation, or promoting suppuration, too little to be appreciated. The topical applications chiefly used, after the first incision, were a blister—carrot poultices—and, in the final stages, cataplasms of yeast and powdered charcoal. The progress of maturation was slow; but at length, pus, sufficiently laudable, began to issue, slowly, from every artificial opening, and also from the meatus auditorious. A considerable abatement of the swelling then took place, so that we, at one time, cherished hopes that the patient might recover; and, had this inflammation, like the others, been seated on the trunk of the body, or one of the extremities, such, no doubt, would have been the result;—for death was not the consequence of the extensive cellular inflammation, but of the phrenitis which it occasioned. Involving, for several inches, the carotid artery, including its bifurcation, that vessel was thrown and sustained, in a state of orgasm, which at once explains the production and fatal termination of the cerebral disease.

The signs of this malady were unequivocal;—jactation, headach, heat of the scalp, fierce expression of the eye, delirium, insanity, vigilance, coma, a variable pulse; and, in the final stages, spasmodic twitchings of the eye-lids, convulsions, and partial hemiphlegia. After suppuration had taken place, the vehement action of the right carotid artery abated very much; but the left then took on an increased energy of contraction, and the eye of that side became engorged with blood, until it wore the aspect of the other. In the midst of so great a variety of threatening symptoms, it was not very obvious what course should be pursued. Occurring in the decline of an autumnal fever, and some of them already in a state of suppuration, it

was manifest that all the phlegmonous inflammations, under which the patient laboured, were of the kind that have a strong tendency to suppurate; and can be better managed by the treatment adapted to that mode of termination, than by resolvents. But at the same time one of these phlegmons was so situated as to excite an inflammation of the brain, which must necessarily prove fatal, if not resolved. The constitutional treatment was, therefore, of course, directed to the latter object. The first arteriotomy has been mentioned; subsequently the patient was bled four times from the arm, and a branch of the temporal artery of the left side was opened; cathartics and small doses of calomel were repeatedly administered; his lower extremeties, which had a great tendency to become cold, were blistered; the scalp was kept wetted, and finally covered with an epispastick. That these active measures retarded the suppurative action, and occasioned the phenomenon, of purulent accumulation in some parts without any of the ordinary signs of inflammation; that they greatly reduced the strength of the patient; and, before his death, presented him in a state of extreme emaciation, was sufficiently obvious; and more than once, we were induced to resort to the cordials, anodynes and tonics, which, but for the presence of the cerebral inflammation, would have been so beneficial; in every instance, however, we found them, after the few first doses, to be injurious. During the last days of his existence, when palliation was all that might be attempted, they were administered more freely, though with but little apparent relief.

After death, permission was reluctantly given, to examine the different abscesses, but not the brain; and the time allowed us was even too short to execute properly, what was permitted.

The cellular substance from the forehead to the clavicle, and from the chin and nose to the occiput, on the right side, had been filled with pus; and, with great part of the vessels, nerves and muscles, was nearly converted into an unorganized and putrid mass. This was especially the case at the angle of the jaw. The parotid gland, could no longer be distin-

guished, and all the parts which lie deep seated, in front of the petros portion of the temporal bone, were disorganized and in a great degree dissolved, quite to the cervical vertebræ. The carotid artery had entirely lost its cellular coat, and exhibited, in the arteriæ vasorum of its membranous tunic, the florid turgescence of inflammation. Finally the extremity of the maxillary bone, without and within, was as completely denuded of periosteum, as if it had been boiled.

Some of the other abscesses were examined. They presented mere collections of pus, in the enlarged cavities of the cellular tissue, without any of the loathsome transformations met with in the first.

The last step in our hasty inspection, was directed to the pulsating tumour, in the region of the heart; which I have already said, disappeared as completely after death, as if it had been an aneurism. Upon dissecting up the external parts, we found a collection of pus, within the sternum and cartilages of the ribs; which, as the subject lay on its back, rested directly upon the pericardium, and consequently received from the heart, when in action, the impulse which caused its external projection between the cartilages and its aneurismal pulsation. The parietes of this abscess were the pleura within, and the attenuated walls of the chest without. The patient at no time complained of pain or uneasiness, in the part affected.

From the time when the facial inflammation began, he lived about sixteen days.

Art. II.—*An account of the death of a man, from a lacerated wound of the Jejunum, the abdominal parieties remaining entire.*

By Daniel Drake, M. D.

December 1st, 1827—John M'Donald, coachman of Mr. P. B. of this city, aged about 22 years, received a kick from one of the carriage horses, standing in the stable. The accident happened at 3 o'clock, P. M. and the unfortunate man expired between 8 and 9 o'clock in the evening of the next day, or in about 30 hours. From the complaints and statements of

the patient, the shod foot of the horse, struck him on the left and front part of the abdomen, between the diaphragm, and the crest of the ilium; but he could not indicate the spot, and no appearance of the integuments enabled me to identify it. He was able to walk from the stable to the house after the accident; but immediately laid down and complained excessively of abdominal pain, and exhibited a kind of hysterical restlessness. His pulse was considerably increased in frequency, but retained as much force and fullness, as can be associated with that condition. As he had not dined, I presumed his stomach to be comparatively empty; and, therefore, not liable to rupture; the constitutional symptoms, moreover, seemed not to warrant the opinion that such an accident had occurred; and viewing it, though with with some doubts, as a case of nervous irritation, I directed thirty drops of laudanum internally, with towels dipped in *hot* water to the abdomen.

In visiting him at night, I found him still in great pain and inquietude. His pulse nearly the same; and his abdomen considerably swelled, tense and painful to the touch throughout its whole extent. Still more perplexed than before, as to the pathology of his disease, I took twenty ounces of blood. It produced a strong disposition to syncope, but no alleviation of his distress. Ordering two ounces of sulphate of Magnesia in divided doses, I left him for the night.

Next morning, I found him much worse. He had slept none; the pain continued; he had vomited several times; no fæcal or urinary evacuation had taken place, though being thirsty he had drunk copiously all night; the abdominal swelling had increased; and his pulse, more frequent than in the evening, had lost much of its volume and firmness. Having seen great benefit from large doses of calomel in peritoneal inflammation attended with feeble pulse, and incapable of comprehending more of the case, than that inflammation was present, I administered thirty grains of calomel.

At 12 o'clock all the symptoms were greatly aggravated. The nurse reported that he had discharged nearly half a pint of urine tinctured with blood; but as he complained of great

pain above the symphysis pubis, laboured under priapism, and had drunk freely, I determined on introducing the catheter; not a drop of urine or blood, however, was evacuated.

I was now convinced that a blood vessel had been ruptured, and internal hemorrhage existed; or that a rupture of some portion of the aliamentary canal had happened; or that extensive inflammation had been suddenly developed, and would speedily terminate in gangrene. Regarding either of the two former læsions as almost inevitably fatal, I thought only of prescribing for the third; and censuring myself for not having drawn blood more copiously in the night, I resolved to make, at least, nominal amends for the supposed omission, and opened a vein. Not more than five or six ounces would flow, and at the end of the operation, his pulse was nearly imperceptible, and his skin leaden, clammy and cool. Directed ol. recini ʒ ij, cathartic enemata, a blister to the abdomen, and a hot foot bath.

At 7 in the evening, his pulse was imperceptible at the wrist, and extremely feeble in the carotid; his respiration greatly embarrassed, and his mind wandering; all the symptoms, in short, portended approaching dissolution, though he was still able to move about in bed, and sit up without support. In less than two hours afterwards he expired.

Appearances on Dissection.

Permission to examine the body having been granted, the dissection was executed the next day at 11 o'clock, fifteen hours after death.

The abdomen was greatly distended. The skin exhibited no signs or effects of contusion. We were struck with the induration (almost corneous) where the blister had been applied, although it seemed, while he was alive, to have produced no effect. This change of texture, which, doubtless, had no connexion with his malady, would seem not to be of easy explanation.

On dissecting up the integuments, we found an extravasation of blood upon the external oblique muscle of the left side, and between that and the internal, near the junction of their tendi-

nons and fleshy portions betwixt the anterior superior spinous process of the ilium and the umbilicus. This determined the spot which had received the blow. On puncturing the peritoneum, a great quantity of gas escaped. On laying it open, there flowed and was sponged out, more than two quarts of turbid fæculent yellowish fluid, without any blood. Indeed, no hemorrhage had existed; but that a rupture of the stomach or bowels had taken place, was sufficiently obvious. The peritoneum, both of the parieties and intestines, every where exhibited signs of inflammation. The omentum had been much inflamed. The intestines, generally, were agglutinated togegether, and to the walls of the abdomen. There had, indeed, been universal peritonitis, but death occurred before it had terminated in any fatal organic læsion. The inferior or pelvic portion, exhibited signs of greater inflammation than the epigastric portions, doubtless because the extravasated contents of the intestines, had gravitated to the lower part of the abdomen. The bladder was quite empty, much contracted and inflamed in its outer coat.

Beginning with the rectum, I examined the bowels upwards, to find the rupture. All was sound till I came within eighteen inches of the duodenum, where I found the jejunum cut transversely one third across. The edges of the wound were lacerated, thickened, somewhat rolled back, and adherent to the outer coat of the bowel upon which they were turned. In another place, close to this, the intestine was nearly cut through. The mucous membrane was but little inflamed. The peritoneal covering of the liver, gall, bladder and spleen, was slightly inflamed. The cellular substance over the second and third lumber vertebræ was injected with blood, and much thickened. The left psoas muscle was the seat of considerable extravasation—it was swelled, tender, and had some of its fibres torn. It was sufficiently obvious, that the bowels had been forcibly pressed, by some part of the shoe of the horse, against the lumber vertebræ and thus lacerated. Such an injury could not, *of itself*, occasion speedy death, and the early and fatal termination of this case, can only be referred to the

impress on the peritoneum, of the contents of the alimentary canal, escaping through the aperture in the jejunum.

Had the precise nature of the internal injury been understood, as soon as the blow was inflicted, could any plan of treatment which it might have suggested, preserved the life of the patient? As he died from the discharge of the intestinal contents into the peritoneal cavity, he might perhaps have been saved, had such an evacuation been prevented. In any case of repletion of the stomach and bowels, such prevention would obviously be impracticable; but when they might be almost empty, as in that under consideration, it would seem, that death would not be inevitable.

In a case of this kind, the following would, perhaps, be the most efficacious treatment: 1. To prohibit the patient from swallowing any thing. 2. By means of cathartic injections, promptly administered, to evacuate the lower bowels, before they should have lost their capacity for peristaltic motion. 3. To give a very large dose of opium, which would have the double effect of quieting the action of the bowels, and preventing inflammation by obtunding sensibility. 4. When inflammation should supervene, to resort to venesection, to cupping or leeching of the parietes of the abdomen, and, subsequently, to an extensive blister over the same part.

By these means the extravasation of the contents of the bowels, would, as far as is practicable, be prevented; while the inflammation inseparable from such an accident might be kept in check, until a union of the lips of the wound, or their adhesion to the peritoneum of some contiguous part, should take place. If the injured part should slough away, reunion might still, perhaps, occur, though the case would be much less favourable to such a result, than cases of intessusception.

I have thought this case worthy of being reported, for several reasons.

1st. It proves that external violence *may* lacerate and rupture, one of the most empty and protected of the intestines, without doing any visible injury to the skin.

2d. It shows that the impress on the peritoneum, of the mat-

ter evacuated through a wound in the intestine, may reduce the powers of the circulatory system, almost as promptly as hemorrhage. I have more than once seen autumnal fever terminate fatally with profuse bleeding from the bowels, and in every case the symptoms were in the latter stages nearly the same with those which M'Donald exhibited.

3d. It proves that a serous membrane may be extensively inflamed, and throw out great quantities of coagulable lymph, within a few hours after it is acted on by an irritating agent.

4th. It presents us with evidence, that inflammation may be promptly developed by an agent, which at the same time greatly reduces the energy of the heart and arteries, a fact which should not be overlooked, in our inquiries into the nature of malignant fevers.

SELECTED ESSAY.

ART. III.—*Observations on Piperine, with the Formula for its Preparation,&c.* By GEORGE W. CARPENTER, of Philadelphia.

From the American Journal of the Medical Sciences, No. 1.

Since the discovery of quinine and cinchonine by the celebrated chemists, PELLETIER and CAVENTOU, vegetable chemistry has made rapid advances. The recent experiments upon vegetable matters have not only swelled the catalogue of useful articles, but have given an additional stimulus to the prosecution, and opened a rich field for investigation, to numberless votaries. From a state of neglect and obscurity, this department of science has emerged, with unparalleled rapidity, to a most exalted position, and the numerous valuable discoveries which have resulted, have ranked it among the most important branches of chemical science.

Every vegetable substance in the materia medica that has yet been subjected to chemical analysis, has produced an elementary or alkaline principle, upon which the virtues and activity of the medicine entirely depend. Even opium, which acts in the double capacity of stimulant and sedative, forms no exception to this observation, two principles having been extracted from it; one possessing stimulating, the other the sedative powers, as we have remarked in a former paper.

These isolated substances possess many and great advantages over the crude materials; the active principle is concentrated by the separation of the injurious and inert portions, thus obviating almost entirely the difficulty of exhibition, and facilitating a more speedy and certain action on the constitution. It is well known that many substances in their crude state, in consequence of their bulk and insolubility, cannot in many cases be administered in sufficient quantity to produce the desired effects; in such instances the alkali is well adapted as a substitute, the dose being comparatively small. Another and no less important advantage of the alkaline principles is the uniform persistency of their strength. No one will for a moment question the inconveniences and evils resulting from the great uncertainty of effects, and differences of activity in most of the crude mate-

rials; and some of the most important are subject to these defects. For example, there are twenty-five species of Peruvian bark, each one differing in strength. Bark even of the same species, from a difference in adventitious circumstances,* to which it is always exposed, and which, though sometimes scarcely affecting its external characters always injures its properties, is rarely if ever found of uniform quality. In the preparation of quinine, I have met with bark of the same species and of the same importation, differing twenty five per cent. in the product of the active alkalies. The physician, therefore, would have been deceived in the strength, and consequent effect of this bark, while the quinine is universally the same. For example, the quinine produced by the inferior bark, although less in quantity, was fully equal in quality. If the practitioner, therefore, may be so much deceived by the difference of strength of the same species of bark, how much more will he be disappointed, should he meet with those which produce but one-eighth or one-twelfth of the quantity, and some yield even but a trace of the principles upon which their febrifuge properties exclusively depend.

The preceding observations in support of concentrated medicines, are made in consequence of there being some few who disapprove of vegetable alkalies, and reject their use on all occasions, giving preference to the crude materials. If the opinions of these persons were drawn from experiments, they would certainly be entitled to credit and respect, but where an opposition is made to admitted facts, without advancing a reason, experiment, or authority of any kind, such denunciations can only be considered the effects of prejudice, and should be appreciated as such.

The object of the present communication is to describe a new principle, recently discovered in black pepper, which has been denominated piperine, and which has been proved by careful experiment to be an active remedy in intermittent fevers, and has been employed with much advantage also in typhus fever and periodical head-ache, and from the testimonials given in its support, seems to bid fair to become an important addition to the Materia Medica. It may be employed in doses of from one to four grains—it has been given in several cases of intermittent fevers in doses of one grain,

*See Carpenter on Cinchona, vol. 9, p. 363, of the preceding series of this Journal.

and was attended with as much success as the quinine. It is found to be a valuable adjunct to that substance, equal parts of each acting with more energy and success, than the whole quantity of quinine.

Black pepper in its crude state has long been known as a valuable medicine, and is stated to be an excellent adjunct to bark in intermittents, and Mr. RENNIE* observes that Mr. BRANDE, must certainly be mistaken, when he says it acts only as a warm condiment, agreeable to the stomach.

It is mentioned in Dr. COXE's valuable dispensatory under the article piper, that Dr. FRANK, physician to her majesty Maria Louisa, recommends the black pepper in different species of intermittent fevers. This had previously been used in the east with success, after every known means had been ineffectually tried. The dose is five to ten grains twice a day, and Dr. GHIGINI reports ten cases cured with it. Dr. Frank mentions seventy patients who came under his notice between April and June, of whom fifty-two had tertian, ten quotidian, and eight the quartan fever. Fifty-four were completely cured within about a week, without any subsequent relapse. He dips the seeds of the black pepper in a mucilage of gum Arabic and subsequently in powdered colombo to disguise it, and gives from five to eight pills twice a day. None of his patients required more than from seventy to eighty pills for a complete cure. Dr. Frank recommends the profession to try the extract of black pepper in intermittent fevers. This preparation was tried on nine individuals affected with intermittent fevers of different types in doses of four, eight, ten, or twelve grains dissolved in water in some cases, and given in the form of pills in others, by Dr. Clock, of Trent, and the effects surpassed his warmest expectations.

From these experiments it is concluded, that the extract of pepper is not only one of the best succedaneums for the bark, but that it is even preferable to it on several accounts:—1st. It never produces disturbance in the stomach or bowels—2d. It never failed in producing a cure—3d. Those who were cured did not in any one instance experience a relapse—4th. It produces a regular alvine discharge, as well as the excretion of urine and sweat—5th. None of those who were cured experienced that sensation of langour, so common to a state of convalescence.†

*See his Supplement to the Pharmacopœias of London, Edinburgh, Dublin and Paris.

† Giornale de Chirurgia Practica.

In the Bulletin des Sciences Medicales for April, 1826, there is an account of three cases treated with piperine, by Dr. S. GORDONI, physician to the hospital at Leghorn. The first case was one of double tertian intermittent fever, which for a long time resisted the use of quinine, and although this remedy eventually arrested the paroxysms, whenever it was discontinued the disease returned; the piperine was then resorted to, and the fever ceased on the first day, and did not return. The second and third were also cases of intermittent fever, they were promptly cured by the piperine. From these, and many other cases, Dr. Gordoni infers, that the piperine will cure fevers that resist the sulphate of quinine, and that it will prevent a relapse better than this latter remedy.

Dr. MELI has also employed the piperine with success, and considers it a more certain remedy in intermittent fever than the sulphate of quinine.*

Dr. J. S. ROSE, who was the first to use the piperine in this city, informs me that he has employed the piperine which I prepared, in twenty cases of intermittent and remittent fevers, and that he is decidedly of opinion that it will be found to be a more certain and efficient remedy than any preparation of bark heretofore used.

"I have also used it," he adds, "in two cases of low nervous fever, or typhus. I was induced to employ it in these cases, from observing that in intermittent it did not prevent all the stages of the paroxysm. At the time the patient expected his chill, he found a gentle diaphoresis, which continued to increase for two, three, and in some cases for four hours; on the next day, however, (of the expected return,) there was nothing like diaphoresis or fever, the patient passed this period without the least inconvenience, and remained exempt from a relapse, which is not always the case after the use of quinine. These facts led me to believe, that in typhus, when we wish a stimulating diaphoretic, no remedy is preferable for that purpose to the piperine, not even volatile alkali. In this form of febrile action when the animal powers are about to yield to the influence of disease, and the patient fall a victim to the timidity of the practitioner, I have boldly withheld all other remedies, and administered the piperine in doses of two grains every two hours until eight grains had been taken, the low muttering delirium now began to subside, the skin became moist, and the patient sensible of his improvement expressed himself better. On the following day the same doses were administered, and repeated for

* Ainslie's Materia Indica, Vol. II. p. 622.

three, four, or five days, when I found no fever, the strength increased, and the patient with an inclination for food, and convalescent."

The piperine has also been used by Dr. J. C. ROUSSEAU, of this city, in a few cases, in all of which it has been successful. He has favored me with the following cases which are interesting, as it shows the necessity of caution in prescribing the remedy in large doses.

"A young girl, about twelve years of age, having had a return of an intermittent fever that had been stopped by the sulphate of quinine, was directed to take one grain of the piperine, made into a pill with conserve of roses. She was a short time after seized with a vomiting, which was repeated to the number of seven times in the space of two hours. It then began to promote alvine evacuations to the extent of twelve or fifteen times. The fever did not return, and she was directed to continue one grain of the medicine night and morning. It invariably produced alvine discharges in an unusual quantity.

"In another case, a subject of about forty, it produced a radical cure in the dose of three grains in twenty four hours, continued for several days after. And it is so much the more remarkable as this patient had taken the sulphate of quinine for some days in the quantity of thirty grains every twenty-four hours, as he informed me, remarking at the same time, that during the use of it he was under a most violent and painful state of excitement."

I have just received the following case from my friend, Dr. J. R. BLACK, of Philadelphia: it affords additional testimony of the powers of the piperine in the cure of intermittent fever.

"Mr. S. aged about forty years, during the first part of last month, applied with a severe quotidian fever, attended with rejections from the stomach, and with violent pain and great determination of blood to the head, during the hot stage, with cold feet and slight delirium.

"The case was treated with the lancet, emetics and purges, which, on the third day, changed its type to the tertian. On the day of intermission, sulphate of quinine was administered, which was often rejected, whilst it always increased the patient's nausea and headache. Piperine, (prepared by Mr. Carpenter,) was substituted in doses of one grain every hour to the number of ten a day. The paroxysms immediately ceased, and the patient in a few days was discharged radically cured. J. R. B."

Many other cases might be quoted, in which this medicine has

been employed with equally happy results, but enough has been advanced to satisfy the most sceptical of its active properties.

Alcohol and sulphuric æther are the best menstrua for the active properties of the pepper, which very soon imparts its acrimony to these fluids. Mr. BRANDE gives alcohol and water. I am surprised he should have omitted æther, since it is the most powerful solvent, and particularly that he should quote water, as it requires five hundred and fifty pints to extract the sapidity of ℔j. of pepper. Water indeed appears to rank lowest as a solvent of the active part of the pepper, while it is the best solvent of the colouring matter, for after the pepper has been exhausted of its sipidity by æther and alcohol, water will make a deep coloured solution, which, on evaporation, will produce a dark extract, possessing little of the pungency of the pepper.

The piperine employed in the above cases I prepared according to the following formula:—

Digest one pound of coarsely powdered black pepper, in one gallon of alcohol for ten days, distil off one half of the alcohol in a water bath, add by degrees diluted muriatic acid to hold in solution the piperine, then add water sufficient to precipitate the resin and separate the oil, a muriate of piperine remaining in solution, concentrate this solution by evaporation, and add pure potass to decompose it, and neutralize the acid, when the piperine, in consequence of the diluted state of the alcohol, and the absence of the muriatic acid, will be deposited in yellowish transparent crystals—the crystals may be obtained perfectly colourless, by carefully separating the oil and resin, but as there is no disadvantage in the colour, the additional trouble and expense would not be compensated. The piperine in a colourless state is insipid and inodorous, but united with as much resin as enters into its crystallization, its taste is extremely hot, possessing in an intense degree all the pungency of the pepper, with a considerable portion of its odour, and, I think, is more active than the former; it was in this form exhibited in the treatment of the cases above described.

The crystals were perfectly transparent, tetrahedral prisms, with oblique summits of a straw colour, and as large as the ordinary crystals of sulphate of magnesia.

Extract of Black Pepper.—Digest eight ounces of black pepper coarsely ground, in four pints of diluted alcohol for four days, occa-

sionally submitting it to a temperature near ebullition in a water bath, filter and evaporate to the consistence of an extract.

This is found also to be an active remedy in intermittents, in doses of two or three grains. In a soft state it has proved very convenient to give consistency to piperine and quinine for the formation of pills, while at the same time it increases their activity, (particularly that of the latter.) It is certainly preferable to conserve of roses or gum Arabic, as they enlarge the pill without increasing its effect.

The extract of pepper, in every formula I have seen, has been directed to be prepared with water. This forms a much less active preparation, and possesses several inconveniences, to which the former is not subject.

I have used both the white and black peppers in the above preparations, and although it is stated by most authors that the white is milder than the black, I have found it to yield more piperine, and an extract of much more acrimony and activity, and to contain much less colouring matter.

The constituent principles of pepper are piperine, oil, resin, fecula, and coloring matter.

The oil of black pepper is a most powerful article, and has not as yet been employed in medicine, it may prove a valuable stimulant.

The several preparations above described may be procured of Charles Marshall, Druggist, No. 221, Market street, Phiqadelphia.

ORIGINAL REVIEW.

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BICHAT ON PATHOLOGICAL ANATOMY.

(*Continued from No.* 9.)

Bronchitis, is a subject of great interest, as it frequently occurs, in this country, in young children; but an extraction of our author's views, would be unprofitable, as it is very limited and vague. Its sympathetic productions are quite common, as in pulmonary catarrhs, pleurisies, peripneumonia, gastric fevers, &c. which frequently terminate in copious, mucous secretions.

Diseases of the Œsophagus, are of two kinds; aphthæ, and corrugation by inflammations, induced by the venereal virus.

Affections of the mucous membrane of the stomach, are introduced by the subjoined extract.

"There are few mucous membranes oftener affected than that of the stomach. The continual state of excitation, in which the organ that it lines exists, is the cause of its frequent diseases; and by virtue of this physiological law, that, *organs the most active, are also the most subject to disease.*" p. 81.

This physiological law, is very erroneous, "*organs the most active, are also the most subject to disease.*" It may be true, in part, but not generally. What organ of the human body is more active, than the heart, the tongue, the muscles, the arteries, &c.? None. Is the heart or tongue more liable to disease, than many other organs of the body?

The black vomit is thus considered.

"We sometimes observe also *vomiting of black substances*, (or black vomit.) It is not known whence these substances come. The ancients called them *atrabile*. The moderns have abandoned this opinion, and believe that blood only is passed in melaena. Nevertheless, the former had perhaps better observed; for, generally, the affection succeeds to slow and sad passions. There is a pain in the region of the stomach and liver, and deep melancholy, as in all organic maladies. The matter passed presents very little analogy to blood, as well

in its colour as in its consistence. Every thing induces us to believe, on the contrary, that it is bile. Vomiting of black matter, or black vomit, often returns. There is generally a concomitant affection of a neighbouring organ. The patient at last dies.

"We then find in the stomach a certain quantity of blackish matter similar to that vomited. The mucous membrane is in its normal state. The adjacent vessels gorged with blood, but this depends upon the kind of death. As to the liver, it is almost always affected. The gall bladder is often full of blackish matter. The spleen also is often in a pathological condition."pp. 83—84.

The approved opinions at this day, are, we believe, that, this black secretion, is the product of a peculiar morbid action of the mucous glands of the stomach, and in some instances, perhaps, assisted by a diseased state of the glands, which secrete the gastric juice.

Cancer of the stomach is considered a disease of its mucous membrane, since the serous tunic is never affected, but towards the end.

Diseases of the mucous membrane of the intestines, are introduced by a few general remarks upon dysentary. The article affords very little interest or novelty; we therefore pass over it: observing, that cancer is particularly manifested in the large intestines; and hemorrhage of this membrane, lining the rectum, sometimes appears in women, from suppression of the menses.

The mucous coverings of the *glans penis*, is liable to catarrh, phimosis, paraphimosis, and ulcerations from various causes, such as too great friction, venereal taint, &c. Bichat remarks,

"As to venereal ulcers or chancres, they may present themselves under two different aspects. Some are coincident with a gonorrhœa and absorb the virus that it produces; in this case they never present any callosities. Others are determined by a pre-existing venereal cause; they present callosities, hard edges, and an unhealthy and abundant suppuration." p. 92.

The article on *diseases of the mucous membrane of the urethra*, affords considerable interest.

"*Catarrh* is the principal disease of this membrane. Every mi-

cous discharge through the urethra is called gonorrhœa or blennorrhagia. Sometimes gonorrhœa is entirely free from venereal virus. As to the gonorrhœa, which has for its cause the latter, its symptoms are so well known, that we shall here only occupy ourselves with the anatomical inspection. The ancients believed that the semen only was discharged in a gonorrhœa, the seat of which was located in the testicles; others have supposed it to be in the prostate gland. Since, it has been observed that, in gonorrhœa, the canal only was painful, and especially in its anterior portion. Morgagni, who first occupied himself with these researches, placed the seat of the disease in the small follicles which are met with in the canal, and which are only the orifices of the excretory canals of the glands which pour out their fluids in these places. It is not in these follicles, but in the glands themselves that the gonorrhœa is located. According to recent observations, the anterior part of the canal has been seen inflamed. If we examine the phenomena of gonorrhœa, we find them in every respect similar to those of other kinds of catarrh. At first there is local pain, a moderate excretion of a serous fluid, soon after a more abundant and thicker discharge, which evidently proves that the mucous membrane only is affected. Often the disease is spontaneously cured, at other times it carries with it dangerous consequences. The discharge of gonorrhœa varies singularly, not only in relation to that produced by the catarrh of other membranes, but also in relation to the different periods of this affection. Sometimes the termination is in reality a chronic disease, and the discharge lasts during four or five months, or even more; persons seldom die from it, but often it is succeeded by a stricture of the urethra. At other times we are ignorant of the true cause of this latter effect. The ancients attributed it to some fungus fleshy growth in the urethra, an idea derived from the supposition that gonorrhœa depended upon the suppuration of small ulcers which exist in the canal. They have also said that it proceeded from cicatrices or bands; indeed we often meet with such; but it is not the most common case. Sometimes there are small tumours which are developed in the cellular tissue, and project into the canal, diminishing its diameter; very often also the urethra, contracts of its own accord, a phenomenon analogous to that of the stricture of the œsophagus and of the stomach. Accidents happen succeeding these strictures: thus we observe urinary fistulæ to follow, which open in different parts.

Gonorrhœa, is almost always an essential affection; there seldom happens any sympathy between the other membranes and the urethra, the cause of which is, that the genital parts almost never participate in the affections of the economy." pp. 93—94.

The subjoined remarks, are found in the article on disease of this membrane of the *vagina.*

Gonorrhæa, with females, has its seat in the vagina, and sometimes also at the orifice of the urethra: hence the pricking sensation they feel on the evacuation of the urine. The catarrh, among them, may be produced by other causes besides venereal affections; it is then called *fluor albus* or *leucorrhœa.* Sometimes the disease is very light, and entirely analogous to a slight coryza. Often also it is more intense, but then it is almost always venereal. The affection does not extend to the matrix, and is arrested at the orifice of the vagina. This gonorrhæa with females is absolutely the same with that of men, with the exception of its termination, which often is in leucorrhœa. However, we ought to refer the chronic catarrhs of the vagina to two causes. First, fluor albus is occasioned by a local affection, as an immoderate coition, suppression of the menses, &c.; at other times it is only symptomatic. One would then be inclined so ascribe them to the general constitution of the person, whose countenance expresses weakness." p. 95.

The disease of the *mucous membrane of the matrix,* we shall present entire.

Hæmorrhages of the mucous membrane of the matrix are very frequent; the most common is known under the name of *menstruation.* It is, as we know, a natural discharge, which begins with women at the age of puberty, and ends at that of forty or fifty years. The seat of this discharge is not in the vagina, but in the uterus: dissection and experience prove it. If we take the uterus of a woman, dead at the epoch of menstruation, and macerate it for twenty-four hours, on pressing it, blood issues, without, in any way, disorganizing the mucous membrane. This experiment has not the same result on the vagina. The menses do not flow by erosion, as it had been supposed, but by a simple exhalation, which varies in its quantity as well as in its duration. It is not uncommon with girls, to see this discharge preceded by a slight whitish flux. Since the menses have their seat in the matrix, it is evident that they must indicate in their alterations the diverse affections of this organ: it is, indeed, what observation proves. Besides, all the passions of the soul, all the general modifications of the body, act on them in a marked manner. The vagina is not subject to these influences, and this circumstance establishes again the seat of the menses in the uterus. Moreover, uterine hæmorrhages are produced by a multitude of causes that we shall not examine at this time.

Cancer is another disease of the matrix which changes all its tissues,

and sooner or later leads to the tomb. This affection is very common, especially in large cities. It may affect the body or the neck of the uterus, seldom if ever the vagina. It is not a disease of young persons. It is observed commonly after the age of final menstruation; nevertheless, there are cancers which appear before this epoch. The causes of cancer of the uterus are very different: immoderate venereal pleasures, repercussion of the menses, itch, ring-worms, &c. Whatever may be the cause, it is ushered in by an irregularity of menstruation, which increases, stops, or changes in its periods: there are cases, nevertheless, in which they are not altered; this is particularly the case when the disease has its seat in the neck of the matrix. There is pain, more or less violent, in the region of the uterus: at first, it is only a weight, then a bearing-down sensation in the lumbar region and at the upper part of the thighs. The belly is insensible to pressure. The general state of the system is very little altered; nevertheless, there is sometimes anorexia and vomiting. If we examine women at this time when the disease is in the neck, we shall find it hard and scirrhous. We must take care not to confound this condition with that presented by the os tincæ, with women who have borne several children. Have scirrhosities their seat in the mucous membrane or elsewhere? it is difficult to determine. When the disease appears before the final cessation of menstruation, it seems to languish till that period; then it makes rapid progress—the symptoms, of which we have spoken, supervene,—and there is very violent pain in the region of the uterus, which sometimes tolerates pressure. The pain in the thighs extends even to the knees; it never spreads any further. The discharge is more or less considerable; at first it is blood, and sometimes it is a true fluor albus. These fluids soon alter, and assume a peculiar character; they alternate, in their flux, with blood. The touch teaches, at this time, that the disease is considerably augmented. The patient dies before the disease has run through its stages. We find divers alterations in the cadaver; if the disease exist in the neck, there is a very considerable swelling, and an enlarged ring (*bourrlet*) analogous to that found round the pylorus in similar cases. Generally women do not die at this first period. It is oftener the middle period which proves fatal.

At this time, the pain is more intense, with very keen heat and slight inflammation of the vagina; urine is passed accompanied with pain; the discharge still continues, either red, or at other times an ichorous fluid, but always very fetid. The glands of the groin seldom become enlarged; but rather those of the mesentery, and especially those of the hypogastrium. The functions soon feel this local affection, digestion is imperfect; anorexia, diarrhœa, marasmus, small pulse, dry skin, no perspiration, infiltration in the feet, and even

sometimes leucophlegmasia The skin of the face assumes a peculiar character; the complexion is leaden. Women generally die at this period. There is not as yet any general disorganization

In the last stage, the symptoms are yet more intense: diarrhœa, marasmus, &c. On dissection we find general disorganization of the body of the matrix, in which the vagina participates. Consequently, at its upper part, the tissue of the organ easily tears. The bladder and rectum adhere to the diseased parts. There often happens a crevice in these organs. All the glands of the mesentery are enlarged. Often to these cancers other affections are added; the engorgement of the glands is the most frequent; we often meet also with steatomatous tumours in the peritoneum. There are alterations which happen just before death; thus, we often find a chronic inflammation of the peritoneum, as we have seen in the article on cancer of the stomach. It is the property of these cancers to extend from tissue to tissue, whilst a multitude of other affections preserve their primitive seat.

We shall not speak here of *polypi* of the matrix, since they are not proper to the mucous membranes which line this organ.

Fungi, on the contrary, particularly belong to it. They must not be considered as cancers. Sometimes, they present themselves on the os tincæ; and at others in the bottom of the uterus. Women always experience more or less abundant discharges; the tumour enlarges, and soon fills up the cavity of the uterus. These fungi are analogous to the hypersarcosis of ulcers, but they are softer and bleed more easily. The vessels which penetrate them are always capillary. The pain is not the same as in cancer. Often, parts of different sizes fall loose between the libiæ: the fungus is soon reproduced with rapidity, and the disease ends in marasmus.

There are other affections of the uterus on which much has been written, but which are rarely met with: such is dropsy. It can exist in two ways: a kind of bag may be formed between the mucous membrane and the other tunics, containing more or less serosity; at other times we find hydatids, small cysts containing an albuminous fluid, and which appear spontaneously. It is believed that they are produced by worms; we shall speak of them more particularly in the article on the liver.

The same is the case with tympanites of the matrix. This organ may be more or less distended by the air, which probably has found its way through the vagina; for, it is difficult believing it to be generated there." pp. 96—97—98—99.

This chapter ends by a consideration of the diseases of this membrane of the bladder. We give the following on *ulcers*.

"*Ulcers* of the bladder are equally accompanied with mucous excretion; but there is at the same time some particular phenomena: such as pain, difficulty in passing urine, often evacuation of blood. On dissection, we find all the surface of the bladder hard, thick, strewed with blackish spots, and the disease is always confined to the mucous membranes." p. 90.

Chapter VII. includes the *diseases of the cellular tissue:* a membrane which "fills every interstice between the organs, which it envelopes, and of which it penetrates the substance."

It is subject to diseases, which may be classed under three heads: "some, idiopathic, arise spontaneously, as phlegmon; others depend upon the continuity of this tissue with some primitively diseased structure, as cancer; the third is purely symptomatic, as leucophlegmasia, which is produced by an organic derangement."

We will first present the author's remarks upon the *idiopathic* affection.

"*Phlegmon*, which is the inflammation proper to this tissue, presents itself under a different aspect from the inflammation of all other parts. Its causes may be internal or external. When they are very feeble, the characters of its attack are not marked. When it is more intense, there happens a chill, heat and pain in the part; in two or three days it assumes a peculiar kind of pulsation; sometimes we do not recognize this last by the touch, and sometimes it is induced by the greater action of the subjacent arteries, at the same time there supervenes a swelling the more marked as the crisis of the malady approaches. This tumefaction must be considered under two relations: at its middle part it is red, and this is induced by inflammation properly so called; at the circumference the engorgement is much less inflammatory; it is rather indurated. The tumour goes on progressively increasing. Let it be observed, that there is no tissue susceptible of swelling, if we except the cellular tissue. Other characters distinguish its inflammation, such as pulsation and heat. Redness does not disappear under the finger, as in erysipelatous inflammation. As to general symptoms, they are common to all inflammations. and are signs of secondary consideration. There are often some gastric symptoms, and a fever more or less violent. As to what regards exhalations and secretions, they vary singularly as well as the strength. The duration of these phenomena is extremely uncertain; it depends, as we know, upon the condition of the patient, his temperament, and the degree of intensity of the disease; nevertheless, it seldom exceeds

the seventh or eighth day. There occur few autopsic examinations of phlegmon in this first condition, in which we find a considerable diminution of the tumour; the swelling at first disappears, and the phlegmon, properly so called, sinks the more in proportion as it was more acute; sometimes it assumes a livid colour; few blood vessels are observed, and the blood is evidently extravasated in the cellular tissue. After the sixth day, or even later, the phlegmon terminates; sometimes it is by resolution, oftener by suppuration, the character which distinguishes it from the other phlegmasiæ. Resolution is indicated by the cessation of symptoms, of pain, &c.; the skin becomes yellow, especially at the circumference, and by degrees it resumes its natural type, but commonly the epidermis exfoliates.

Suppuration is announced by very peculiar phenomena; the pain changes in its nature, and from poignant it becomes tensive; the tumour presents in the centre a projection more red, the skin becomes thinner, and a fluctuation is felt. It opens commonly outwards if we permit nature to take its own course, and pus is inclined to seek its way to the exterior rather than into the cavities. When we examine an abscess, we see this appear under two different conditions. The greatest number of exterior abscesses have their pus in a mass, and enclosed in one centre intersected by bridles. As to those which are contained in the interstices of deep seated muscles, pus is there commonly infiltrated in the cells of the surrounding cellular tissue.

How is pus produced? This production in the cellular tissue is a character which distinguishes it essentially from that of the serous or mucous membranes, which is only effected by the augmentation of the exhaled fluids; on the contrary, pus, properly so called, differs very much from the fluid which moistens the cells of the cellular tissue. It is evidently formed by exhalation and not by rupture, as has been supposed; and this we prove by the analogy of the different membranes. Besides, after obstinate suppuration, we do not remark any erosion in the abscess which has discharged it. But how comes it to pass that the minute vessels which brought the blood for the nutrition of the part, now discharge a purulent fluid?—We know nothing about it; all we know is, that there exists manifestly in them a change of sensibility.

Pus is a viscous, whitish fluid, slightly adhesive, inodorous, when it is of a healthy nature, but may vary infinitely.

Chronic inflammation is another mode of termination of phlegmon. It often succeeds abscesses; resolution cannot be entirely induced, the parts harden, cicatrization cannot be formed, and there remains a fistula.

The last termination of phlegmon is gangrene. It may depend upon the intensity of the inflammation, but it is often occasioned also by a deleterious cause which mingles with the primitive disease; it is then

called *carbuncle.* We distinguish two kinds; the symptomatic, (of which we shall not speak here) and the idiopathic. The essential carbuncle is an extended tumour, seated in the subcutaneous cellular tissue. Its colour is a livid brown. This tumour, harder than the usual phlegmon, is often accompanied with a lymphatic thickening (*empatement.*) Soon after there rise small phlyctænœ, on its surface; they discharge serosity, and the skin is observed to be gangrenous; the eschar is formed, a reddish circle circumsbribes it, finally it falls off, the sanies runs for some time, and the ulcer at last assumes a better aspect. The pain in this carbuncle presents a peculiar character of heat. The strength is always prostrated; besides, the disease undergoes singular modifications, according to the prevailing epidemic.

The cellular tissue, in diverse parts of the body, presents differences in its affections according to the parts which may be the subject of our examination.

The sub cutaneous is more exposed to diseases, being the nearest to the external surface. All causes proceeding from without act on it. That of the head is oftener affected on the face than on the cranium. Whatever may be the seat, the subcutaneous phlegmon always presents analogous and distinctive characters; at first, it is always circumscribed; the skin is red, the only membrane which is thus inflamed conjointly; which is evidently induced by its organization: its internal surface is composed of areolæ, which embrace a part of the cellular tissue; this last is infiltrated in leucophlegmasia, and is detached after maceration. From this association of the skin, there results an erysipelatous phlegmon. When resolution occurs, it also takes place in this part; suppuration disorganizes and pierces it: the same thing happens in gangrene." pp. 101—102—103—104.

Furuncle, is an inflammation common to the skin and cellular tissue. It is totally different from phlegmon. In furuncle, "pus is really infiltrated, and there is no remains of disease on the skin after the cure, whilst, in phlegmon, there always remains a cicatrization.

A cellular tissue exists under the mucous membrane, as under the skin, but is less abundant, and seldom the seat of phlegmons, excepting near the rectum.

We present the following, as a few of the various terminations of diseases in this membrane.

"Ulcers affect particularly the cellular tissue, whatever may be the organs they interest. They often succeed wounds. If, after a wound has run through its ordinary stages, suppuration is kept up by

any cause whatsoever, this wound assumes then the appellation of *ulcer*. Exterior ulcers may affect diverse parts. Some are purely cutaneous, such as the scabby ulcer (*ulcere dartreux*), or those which supervene after a blister. At other times they have their seat immediately in the cellular tissue, such are those which succeed the phlegmon, furuncle, or carbuncle. All these ulcers are the consequence of the chronic phlegmasia of the cellular tissue. There are others which interest the muscles, aponeuroses, and of which we do not yet fully understand the alterations in these diseases. The vitality of each organ exerts an important influence on the condition of these ulcers. Very often, these latter interest several tissues at the same time; but the cellular tissue always acts the most essential part, since it is the most abundant, and is that which produces pus.

In simple ulcers, in general, the edges of the skin are a little swollen; all the cellular tissue is denuded and then covered with granulations; suppuration, more or less copious, is a true exhalation. As to the subjacent parts they are commonly untouched.

Ulcers may present several complications. They are often covered with a great quantity of fungous excrescences; which are always accompanied with paleness, indicating the bad condition of the wound.

Callosities are also a very frequent complication; all the organs are susceptible of it. At first, it is only a more or less intense engorgement, but which continually increases, so that, at last, the cellular tissue assumes a steatomatous consistence. Besides, these callosities are in their nature entirely unknown. They may assume very different characters. In a simple ulcer, they commonly make no progress; but when it is malignant, they enlarge very much. The skin often participates in this complication.

The fistulous condition is a complication of ulcers, which only consists in a peculiar mode of conformation, which requires for them a peculiar treatment. Fistulæ are generally kept up by a discharge of pus, or any other fluid whatever. In certain cases they exist without any known cause. Whatsoever be their source, they have nothing uniform in their conformation. The fistulous canal is ordinarily a little inflamed and callous.

Varix is also a complication of ulcers; it is extremely frequent with individuals of a weak and plethoric habit; there supervenes an ædematous swelling, which disappears by the use of a bandage.

Leucophlegmasia is another affection of the cellular tissue, almost always symptomatic. Nevertheless there are some which are essential, that are always local. Thus do we see sometimes an œdema of the eyelids more or less considerable. It is especially in the parts in which the cellular tissue is most loose, and in those which are the lowest, that dropsy occurs; such are the scrotum and the inferior extrem-

ities. However, in this disease, the tissue is not in the least altered, and its cells are only dilated. The fluid effused is transparent, and is easily coagulated by the action of acids; in a word, it is the same as that which we find every where exhaled." pp. 107—108—109.

This article, is one of much interest, and needs no apology for our lengthy extracts from it; for no man, perhaps, ever had a better opportunity, of investigating these subjects, than Bichat; we therefore give our readers, in extenso, his remarks upon encysted tumours.

Encysted tumours have also their seat in the cellular tissue. Two kinds are distinguished, wens and cysts properly so called. There are two species of wens, some are meliceritious and some atheromatous. Wens may appear in every part of the body. Some are observed on the neck, cranium, back, and face. They are always rooted in the subcutaneous cellular tissue, and generally the skin which covers them is untouched. Several may exist in the same part; they may be either insolated or united: they vary in their form and volume. Dissection shows us that they are a kind of bag without any opening, which contains a fluid; the external surface of this bag is united to the contiguous cellular tissue; the internal smooth and polished, corresponds to the contained fluid. These bags vary in thickness, so that the cysts of which the fluid is the least liquid, are those of which the parietes are the least thick. Sometimes there are bands within these bags, and at others there are none. As to the fluid it varies singularly: sometimes it resembles honey, and at others curd. It seems that these varieties are purely accidental. Its colour is no less variable. Moreover, whatever may be its colour and consistence, albumine seems to be the base of it.

Physiologists have tried to explain the formation of cysts. It seems that the membrane of these bags has a very great analogy with that of a cicatrix, that it is produced by the formation of granulations, and not by the flattening of the cells, as it was supposed by the ancients, which would be contrary to all the laws of the economy.

There are also some cysts, properly so called, in which is found a serosity almost limpid. These tumours are entirely analogous to the preceding. Some are found in the abdomen and in other parts; but it is especially along the spermatic cord that they are to be met with: the fluid which they contain is seldom altered.

The cysts of the *ovary* do not belong in reality to the cellular tissue; but we shall speak of them here because they have a great analogy to those of this tissue.

A great many subjects present some remains of this dropsy, which

depends almost always on some alteration in menstruation, either if it appears at the final cessation of menstruation, or before this epoch. Whatever may be the cause, this disease cannot be recognized in the beginning. The patient experiences a weight in the part, but it is not a well defined pain. The disease carries along with it very few general alterations; when it begins to be well characterized, there are some signs which enable us to detect it, for example the size of the abdomen. But with this character alone, we may confound the dropsy of the ovary with ascites. In order to distinguish these two diseases, we must have recourse to the symptoms which have preceded. In ascites, there will have been a preceding malady: in dropsy of the ovary, there will have been only a derangement in the menses In this latter case, the tumour is from the beginning circumscribed; in the former the whole abdomen is tumefied at the same time.

In the dropsy of the ovary, there is no infiltration of the lower extremities; the disease is very slow in its progress, for some have been observed to have existed during eight or ten years. But from this enormous distension results at last a derangement of the functions; digestion is impaired, and the pulse is feeble, as in all dropsies. Urine is, of all the secretions, that which presents the greatest varieties; sometimes it is abundant, at others it is suppressed, and according to these two conditions, dropsy increases or diminishes. The skin is parched, pulmonary exhalation almost absent, and leanness extreme. Dissection shows the ovary to be enormously dilated; in its internal surface there is a kind of false membrane formed. Sometimes its cavity is divided into two. The fluid which it contains is always altered; it presents different colours, and different degrees of density.

Steatoma is also a tumour which is developed in the cellular tissue, and which is surrounded by a membrane, being only less sensitive than that which forms cysts. This membrane sends off into the interior, prolongations which constitute the cells and contain the fluid. This latter is denser and more solid than in meliceritious tumours; it has a yellowish tint, and contains a great quantity of albumine. This kind of tumour may supervene in all parts of the body, but especially under the skin. They are recognized by a very peculiar hardness; if they are incised, nothing is discharged. They are often observed on the head, neck, and trunk; we find them also in the cavities, that of the cranium excepted, where the want of cellular tissue renders the existence of those diseases of which it is the seat, impossible. The same is not the case with the thorax; since it presents much more cellular tissue, and consequently some steatomæ are here developed; these tumours cause then peculiar consequences, according to the organ with which they are in contact: it is impossible to detect their existence, and we can only suspect them. In the abdomen

they often supervene in the mesentery, and are the cause of violent abdominal pains; at last, they form such a projection that they can be perceived by the touch. At first there is no disturbance in the digestion, but at last, marasmus supervenes and carries off the patient. Steatomæ may also be found in the pelvis. Some are also seen on the members. These tumours are nearly similar wherever they are observed; they nevertheles vary in size. Those we find under the skin may be very small; but in the cavities they acquire an enormous size: there are then no pathological signs to detect them, if we except their hardness to the touch, and the alteration of the organs that they encumber by their volume.

Lipoma (fatty tumour) is nearly similar to the preceding one, which always occurs in the subcutaneous cellular tissue. This tumour is more or less voluminous, and often presents a pedicle. It is formed by a concretion of fat, sometimes altered in its nature." pp. 110—111—112—113.

The affections of this tissue from contiguity are obvious, "for when one organ participates in the disease of a neighboring structure, it is [almost] always through the cellular tissue, that it receives its impressions." *Emphysema* is numbered as one of its maladies, limited to the parts surrounding the thorax, there are also some cases of gangrene.

The sympathetic affections of the cellular tissue, concludes his remarks upon this membrane. We will only present two paragraphs.

Œdema is one of the most frequent affections of the cellular tissue in acute fevers, and even in intermittent fevers whenever they are a little protracted. Then a slight œdema is observed in the legs, more considerable towards the evening, and disappearing during the night. In organic diseases, this phenomenon is very common. The affections of the liver, of the spleen, and particularly of the lungs, cause a leucophlegmasia which ordinarily begins by an infiltration of the legs, and which is often complicated with dropsies of the serous membranes.

Emaciation is also a symptomatic phenomenon of the cellular tissue, for, it only supervenes on the occasion of some primitive affection. It is not the consequence of certain organic maladies, such as those of the heart, and brain; but those of the lungs and several others always produce it." p. 115.

The next chaper is taken up with the pulmonary diseases.

It is more or less interesting, but most of the remarks, contained in it, are familiar to the profession, and therefore we pass over it, by merely giving the following extracts.

"There is a mode of suppuration proper to the lungs; it is the infiltration of their tissue by a serous and whitish substance which gives to it a fleshy aspect resembling the substance of the liver, and indeed they are then said to be *hepatized* (*hepatise.*) The following signs are those which would induce us to suspect its existence during life, towards the ninth or tenth day; there is no remission; the sputa are of the same nature; breathing is every day more difficult, especially when the patient has drunk something; he finds some difficulty in lying on the diseased side; percussion becomes more dull; prostration increases; there is almost always a florid redness on the cheeks, which is ordinarily a positive sign of affections of the lungs. The symptoms continue to increase, and sometimes the patient dies suddenly. This termination is frequent in peripneumonia, complicated with adynamia or ataxyia; in the bilious and simple form it is something less frequent. It is remarkable that in the complication of adynamia, the patient never dies from the latter, but always from the affection of the lungs, and commonly after the four or five first days of the complication. However, in these terminations the lungs are found thickened, weighing three or four times more than when in a healthy state. There is no organ susceptible of acquiring an augmentation of weight so quickly. This facility of being engorged, is to be ascribed to the extensibility of the lungs." pp. 118—119.

Again, as to the causes of *phthisis.*

"The causes which produce the first stage of phthisis, although very numerous, may be reduced to a certain number of heads, as an hereditary disposition, an acute affection of the lungs, the suppression of an evacuation, any virus whatsoever, &c.

Hereditary phthisis does not depend, as the ancients supposed, on a virus transmitted with the semen, which is only developed at a certain epoch; it must evidently be ascribed, as well as all other analogous diseases, to a peculiar conformation, proper to certain families. These differences influence as much the external conformation as the structure of the organ, so that we might say, respecting this, that every family has its temperament, which predisposes it to a certain malady, that we then call hereditary." pp. 120—121.

And also,

"The phthisis which follows catarrhs and peripneumonia, occurs at

all ages; and is seldom to be met with after the age of twenty-five or thirty years, an epoch at which nutrition is particularly directed to the thorax. When it has for cause an hereditary disposition, phthisis is almost always tubercular. We mean by tubercles those granulations which grow by degrees, suppurate, and, by their collection, form vomicæ." p. 121.

Calculi, hydatids, steatomæ, and asphyxia, are all considered as affections, occasionally, appearing in the lungs.

The scarcity, and at the same time importance of this work, in the western states, has induced us to analyze it faithfully, giving as many extracts as possible, for our limits; knowing the subject to be important, and the arrangement essential, to a successful investigation of clinical practice.

We designed, at the commencement, to confine our inquiries, to our author's remarks upon the elementary membranes of the body: we therefore, pass over the chapter which considers the diseases of the glands. They are interesting, but common, at this day, with most of the standard authors upon the several subjects.

We will give a few extracts from the chapter of *diseases of the cutaneous system.*

The following is Bichat's opinions on the relative affects of heat and cold upon the skin.

"The action of cold on the body is nearly the same as that of caloric, when it is carried to a certain degree. Its first action is to stimulate, as does caloric in its first mode of action; with this difference, that in this case there never happen any phlyctænæ on the red parts. When cold is very intense, there is numbness; it becomes debilitating, the complexion of the skin is blueish, livid, and at last mortifies throughout. It is not uncommon to see, in northern regions, the extremities become mortified by excess of cold, especially in old people; in this case, not only the skin dies, but even all the subjacent parts: therefore, heat and cold act on the skin nearly alike." p. 159.

And again, his remarks upon *tinea capitis.*

" The ulcers produced by scald-head have been imperfectly understood. Some have placed their seat in the bulbs of the hairs; but erroneously so. Autopsic examination shows us that they are situated

on the surface of the chorion, and that they seldom extend any further. Sometimes scald-head ceases all at once, at others it is indefinitely prolonged, until an efficacious means is used to remove it. Often there exists a general diatheses of this affection; if it is repercussed, it may produce fatal results in the interior." p. 165.

More interesting matter might be presented from this work. There are, about, fifty pages, devoted to the diseases of the muscles of organic life, which includes the heart,—digestive muscular, and uterine tissues:—The diseases of the muscles of animal life:—The arterial and venous systems; and the nervous, which considers, apoplexy,—fungi of the brain,—and fatuity;together with the sympathetic affections of the brain, and the various diseases of the nerves. Also, the disorders of the absorbent vessels, and lymphatic glands:—the fibrous, synovial, cartilaginous, medullary, osseous, and epidermoid systems.

Our limits will not admit of further consideration of the author. System is all important to the student, therefore, to him we recommend, this work. W.

SELECTED REVIEW.

ART. V.—*A Treatise on the Effects and Properties of Cold, with a Sketch, Historical and Medical, of the Russian Campaign.* By MORICHEAU BEAUPRE, M. D. Regimental Surgeon in the French Service. Translated by JOHN CLENDENNING, A. B. and M. D., with an Appendix by the Translator. Octavo, pp. 375. Edinburgh, Maclachlan and Stewart, &c. 1826.

[We copy from the Medico Chirurgical Review, the principal part of an interesting analysis of the above work.—EDITORS.]

This work consists of nine chapters, namely, 1, *Caloric and heat.* 2, *Cold in general.* 3, *The effects of cold on the animal economy.* 4, *Historical and medical view of the Russian Campaign.* 5, *Asphyxia, gangrene, and death from cold.* 6, *The application of cold to the hygeia.* 7, *Therapeutical effects of cold.* 8, *Refrigerants.* 9, *The application of cold to disease;* and to which the respectable translator has added an appendix of 52 pages, "to strengthen some positions of the author, which appeared to need farther evidences, or as *riders* on clauses in the original, containing decisions too exclusive and unqualified."—Of the last six chapters we intend to give distinct analyses, and of the first three, obviously least important, the following general summary is attempted, to save space for graver and better matter.—1, Moderate heat, like moderate cold, excites organic action; 2, Heat exalts sensibility, but diminishes contractility: whereas, cold lessens sensibility, and raises contractility; 3, The moderate action of heat and cold is alike conducive to the support of life; their immoderate effects alike injurious, since they annihilate moral and physical power. Extreme heat causes apathy and languor, dissolution of the blood and other fluids, gangrene and death. Excessive cold chills, benumbs, debilities, and produces even sphacelus, and loss of life.

4. *Historical and Medical view of the Russian Campaign.*—The Historical part is purposely passed over, because it will be found in

a preceding Journal, and we studiously, and on every occasion, avoid repetition. The fatigues of marching, atmospherical variations, excessive heat by day, and sharp coldness by night, the bad quality of the water that served for drink or the preparation of food, and which was often drawn from swamps and marshes, or rivulets at the bottom of ravines, in which carcases of men and horses were putrefying, abuse of grain spirit, food alternately scarce and plentiful, sometimes good and sometimes bad, an irregular mode of life, deficient distribution of necessaries, which often lead to plunder, may be enumerated as causes injurious to the health of the French soldiers, and in consequence many suffered from illness. Diarrhœa, by quick depression of strength, did much mischief, and this was occasioned by impure water, and bread made principally of rye. When bread was wanting, the soldiers fled to flour, and with this flour, already warmed, they mixed broth or water, seasoned with a little salt. With this compound they greedily satisfied their appetites, and concluded with a glass of water, or of pungent empyreumatic grain spirit. This food underwent an acid fermentation in the stomach or intestines, which rendered it indigestible, and gave rise to windy colics, a mucous atony of the intestinal tube, and an abdominal colliquation that wasted the body. The heifers, goats, sheep, and oxen, belonging to each regiment, sank into contagious disease from neglect and fatigue. Next followed the conflagration of Moscow, where, amidst horrible disorder, beer, wine, and brandy abounded, and of these many soldiers largely drank. Such excesses, after such privations, were debilitating—they multiplied disease, and consigned numbers to hospitals established in edifices which had escaped destruction. The burning of Moscow, the anticipated haven of luxurious ease, completed the misery of the French army; and many soldiers, alas! too many, were seen sick or wounded, retreating at random, sad, pale, and dejected, begging, with tears in their eyes, for a morsel of bread. Moscow was evacuated in the middle of October, 1812, and retreat was commenced under hardships that would have appalled the stoutest heart. The autumn had been mild, the fine weather seemed prolonged, and the frost was delayed to mock human hopes. From the 20th to the 25th day of October the cold became intense, and the rigor of winter began to press upon the retreating army. Food speedily diminished in quantity, and horses died on the road from exhaustion along with unhappy soldiers. Unrelenting cold, want of food, and ravenous hunger imperiously forced soldiers, officers, phy-

sicians, commissaries, and other functionaries, to eat the flesh of horses, which lay in the roads, fields, and ravines. Those who were strongly impelled by hunger ate that flesh raw, but usually it was roasted at the bivouack fire, which only rendered it harder and drier. The soldiers had no longer strengthening drinks:—coffee a little supported the officers. The ice was broken to obtain water to dress horse flesh, or the refuse of vegetables and aliments, that the strictest search, and the most cunning marauding could procure. Discipline was relaxed, licentiousness arose from want of food, and numerous soldiers wandered into the plains, and perished by cold and hunger, the sword of the Cossack, or the vengeance of the incensed peasant. Encamped on a frozen soil, sometimes without fuel to light fires, these wretched men, whose clothes were torn or destroyed, arrayed themselves in the most fantastic dresses to obviate the effects of the most piercing cold. The dying and the dead were plundered for their coverings, the petty distinctions of military rank were forgotten, and all were equal when misery and privation reigned. Still, a great number, like desperate pilots steering with shattered sails—men, whose all was courage, stemmed an almost overwhelming torrent, yet even they to whom victory was familiar, and death a blessing, sank in strength:—the skin was dry, filthy, earthy, contracted; the face was care-worn; and a long beard seemed to denote wickedness and dirtyness. Many fell victims to a frightful bulimia. Men quickly died on the road, or slowly expired, for neither assistance nor asylum could be obtained. Melancholy and nostalgia did infinite mischief; they either prepared or accelerated destruction. Along the road, or in the neighboring ditches and fields, human bodies were to be seen in fives, tens, fifteens and twenties, which had perished during the night. Smolensko the army reached early in November, but affording no succour, it was abandoned in a few days, and here again the wounded were consigned to the implacable elements, and reposed on snow which was stained with their blood. Horse-flesh was a never-failing resource to the surviving and proceeding troops; and they even became nice as to particular parts, for the brain, tongue, and liver were ever considered to be most tender and delicate. Many individuals had their hands, feet, and ears frozen, and happy were they that escaped the loss of an entire member. Some remained, mortally seized by cold, when obliged to stop to satisfy pressing necessities. Wilna, already exhausted, furnished few resources. The cold was then most rigorous, for early in De-

cember it ranged from 9° to 20°. United in one city, the prey of disease and alarm, an immense number of feeble beings, and of expiring sick and wounded, were stretched on the streets and squares, without fire or succour. The private houses and hospitals were filled with about 16,000 patients, and thus did the asylums of humanity, become the tombs of mortality. The remains of the army, attacked and harrassed by the enemy, were obliged precipitately to quit Wilna, and marched between rows of frozen corpses, or abandoned persons, who had died unknown and unregarded. Towards the middle of December, 25 to 30,000 men, fragments of a once formidable army, repassed the Niemen. On the public place of Krasnoe, in the villages, through which the prisoners of war marched, and on the road to Kursk, heaps of frozen corpses recalled to the mind the verses of Corneille, depicting the battle of Pharsalia.

"Ces montagnes de morts prives d'honneurs funebres."

The victims of cold and misery were seen walking, insensible and unconscious; and when human nature, too hardly taxed, could do no more, they sank never again to rise. The danger of stopping was imminent:—safety was only to be had in motion and stimulus. The pulse of those, whose fate was sealed, was scarcely perceptible. Respiration, very unfrequent, and hardly sensible in some, was attended, in others, by complaints and groans. Now the eye was open, dull, fixed, wild, and the brain was seized by quiet delirium;—next, the eye was red, announcing transient excitement of the brain, with more marked delirium. Some stammered incoherent words;—many, had a convulsive laugh. Blood flowed from the nose and ears of several soldiers, who agitated their limbs as if for a specific object. Numbers, overpowered by cold, uncovered their chests, and shook their arms like those "labouring under deaf delirium in an ataxic fever." Here they no longer felt a desire for food, and the spastic pressure of the lower against the upper jaw was almost constant, and increased with the progressive effects of that cold, which caused torpor and death. In this manner did thousands perish, and ultimate sickness was nearly the universal lot of those that escaped. A number of soldiers, more or less seriously injured by cold, during the year 1813, filled the hospitals of Poland, Prussia, and Germany. From the shores of the Neimen to the banks of the Rhine, the fragments of an army, desolated by cold and misery the most appalling, were to be recognized. Many, whose climax of sufferings was not

yet complete, distributed themselves into the hospitals on this side of the Rhine, and even as far as the south of France, to undergo various extirpations, incisions, and amputations. Mutilations of hands and feet, loss of the nose or of the ear, weakness of sight, deafness, neuralgia, rheumatism, palsies, chronic diarrhœa, and pectoral affections, attested the calamities resulting from the expedition into Russia. The power of cold over the fauces and trachea, as well as the voice, not particularly noticed by the author, has been finely expressed by a writer who, for his talent and poetry, deserves to be better known, and more read.

> "Ægrescunt teneræ fauces, quum frigoris atri
> Vis subiit, vel quum, ventis agitabilis aer
> Vertitur, atque ipsas flatus gravis inficit auras,
> Vel rabidus clamor fracto quum fore sonore
> Planum radit iter. Sic est Hortensius olim.
> Absumptus: caussis etenim confectus agendis
> Obticuit, quum vox, domino vivente, periret,
> Et nondum exstincti moreretur lingua diserti."
>
> *Seren. Samonicus, De Medicina*, c. 15.

5. *Asphyxia, Gangrene, and Death from Cold.* Few words have been used more loosely by the profession than the word Asphyxia. This term from *a*, priv. and *sphyxis*, a pulse, simply signifies the absence of the pulse, but is now applied to every apparent loss of vitality. By the present author it is employed to denote "partial congelation" from cold, and it is to be understood in this sense in the pages of this analysis. The states about to be considered are produced by an abstraction of caloric, and stupefaction of the vital powers, resulting from an excessive or prolonged application of cold either to a part, or the whole of the human frame. The insidious effects of this agent may extend from the slightest numbness to the suspension and abolition of every motion and feeling. Individuals are generally least or most obnoxious to it in proportion to their powers of resistance. Soldiers, whose dress is little prepared for exigencies, often have their ears and fingers attacked by asphyxia and mortification, while troopers frequently, and even unknowingly, have their toes and feet frozen. Sentinels, victims of an icy night, have been found stiff and motionless. Repose or inaction is dangerous in cold weather. If a sleeping person be exposed, and insufficiently covered, cold soon seizes him, because the vital motions are slower, and fa-

vourable reaction is feeble and powerless. Asphyxia and gangrene have supervened upon transition from a high to a very low temperature, or from sudden variations, as Larrey has experienced. Moderate stimulus is beneficial to him that keeps in motion, but detrimental if he stop and sleep. Asphyxia* from cold is divided into *partial* and *general*. The local is the effect of cold on the nose, cheeks, lips, chin, ears, feet, and hands; parts far removed from the heart, and whose vitality is consequently less active. *Partial* asphyxia presents various phenomena in its progress, which furnish grounds for a distinction of three degrees.—*First Degree.*—The general action is more manifest on one of the parts exposed. The alteration of the vital properties commences with painful formication. The skin of the extremities of the fingers, nose, ears, &c. after having been for a long time red, hard, and affected with painful prickings, grows pale; its temperature and sensibility diminish; its vitality seems entirely extinct. Local numbness gradually succeeds a disagreeable sensation, of which the subject is glad to be relieved, and thus he is unconscious of a change from bad to worse. Yet this unhappy change may be prevented by frictions with snow, for the points of the nose, &c. at this critical juncture are of a horn white, and resemble the colour of old wax.—*Second Degree.*—After entire cessation of pain, the part remains cold and insensible; sometimes phlyctenæ arise; and occasionally the alteration of colour in the skin, which is livid and blackish, evinces from the beginning, mortification. In both of these degrees, re-action infallibly supervenes; and it is announced by lively smart pain, and redness of the skin. When moderate, it is salutary, but it is not without danger when too impetuous, or cencentrating its action on a particular spot. On the energetic return of sensibility and contractility, no matter how induced since the effect is the same, the blood and humours flow into the dilating tissues, and occasion a circumscribed distension. An insupportable formication and itching arises in the whole part; sometimes the pain calls forth complaints and cries; and ardent inflammatory action is

*The reader will be pleased to recollect the sense in which this word is employed by the French author. Literally it means a want of pulse, more extendedly an apparent deprivation of life; M. Beaupre uses it "to express partial congelation, only because modern writers have "shown him the example." Such an example would have been "more honored in the breach than the observance."—*Rev.*

established along with sharp and biting heat. When the skin, at the highest re-action, preserves an equal redness, the fear of gangrene is less than when it assumes a livid, or violet marble colour. Here the epidermis rises in different places, forms brown or blackish vessicles, which are filled with a serous, bloody, ichorous, or yellowish fluid, whose presence increases the disagreeable and obtuse sensation that is experienced. This disorder is not confined to simple elevation, and desquamation of the cuticle in layers.—It extends into the interior, and constitutes the second degree of local asphyxia since the cold destroys the skin, tendons, or aponeuroses, while eschars of various extent are produced along with an inflammatory circle.—*Third Degree.*—This is sphacelus. If to paleness and sensibility there be added a total cessation of organic action, and a feeling of very great weight; if an easy separation of the epidermis disclose a livid marble colour of the cutis, and if to the flaccidity of the muscular fibre, which is insensible to stimulants, there succeeds a putrid exhalation, no doubt can be entertained of the complete sphacelus of the part implicated. *Treatment.* The *contraria contraris medentur* would here be very dangerous in practice. In very slight numbness, a gentle and graduated heat to dissipate it, or moderate frictions with woollen cloth may be employed without inconvenience.—But when there exist complete stupor, and suspension of all motion, heat is unsuitable, since it would be sufficient to cause rapid gangrene by a sudden change of local condition. The true method consists in slowly exciting re-action, in gently recalling the vital properties, and preventing their too rapid restoration. It is proper to begin with efficacious means on the confines of the asphyxiated part, and afterwards they are to be used generally. Frictions with snow,* or pounded ice, are best;—when they seem to do good, the transition should be to water successively less cold, and after the part has become sensible, luke-warm water is to be applied, and ulti-

* The general practice of applying snow to frost-bitten parts, appears to be contrary to the observation of an enterprising navigator, who must have had considerable personal knowledge of the powers and effects of intense cold.—"The Esquimaux have a very effectual way of restoring the circulation, which is by laying a warm hand on the place affected. We had always been accustomed to rub the spot with snow, which frequently caused irritation, and left the part so tender as to render it extremely susceptible of other attacks."—*Capt. Lyon's Private Journal, &c. London, 1824, Octavo, page 124. Rev.*

mately warm water under prudent restrictions. If the violet or black spots have disappeared, if the affected spot be soft, supple and red, we must confine ourselves to simple dry frictions with flannel. Where re-action is feeble, where insensibility shows itself with an atomy almost œdematous, and where sphacelus threatens, it is allowable to employ "embrocations prepared from oak-bark, cinchona, mustard, aromatic plants, &c. and to which wine, alcohol, myrrh, and camphor may be added." If, at the end of a few hours, the skin have not lost its livid or violet hue, it is to be scarified, and treated with the topical means just enumerated. Turpentine has been regarded as an advantageous remedy for dissipating numbness from cold. Internal excitants may sometimes be useful, and they shall be noticed under general asphyxia. Gangrene once established, whether primary or consecutive, only demands ordinary management, and, according to strength and means, nature, sooner, or later, makes a boundary between the dead and living tissues.—*General* asphyxia extends at once over the whole machine, and exhibits the image of perfect death; yet persons, found senseless and benumbed, have been brought to life after a lapse of twenty-four or forty-eight hours. Man re-acts against a rigorous and immoderate cold as long as his strength and courage will allow, but re-action has its limits, and a moment arrives when the powers of the vital principle are exhausted. Then, and not till then, the faculties, physical and moral, seem as if enchained, and at length abandon that body, which they have so stoutly clung to under every disadvantage, to the progressive and always increasing power of cold. Shiverings, puckerings, paleness, coldness of the skin, livid spots, and "muscular flutterings," indicate the shock which is given to the vital forces. The subject feels syncope approaching; his stiff muscles contract irregularly; his body bends and shrinks; his limbs are half-bent; sometimes lassitude invites him to repose;—occasionally a feeling of weight and general numbness retards his steps; his knees grow weak, and he either lies down or falls. He then experiences an invincible propensity to sleep; every thing around him appears strange; his senses are confused, his mind dull, his ideas disturbed, he stammers and raves, and if he be free from suffering he is often not so from agitation. Now he cannot be roused, he entreats to be permitted to sleep; he slumbers; remote parts become cool; respiration, at first interrupted, is slow; the contractions of the heart are feeble, quick, hard, irregular, and sometimes painful; the pulse is progressively smaller; the central

heat is extinguished; the brain stupefied; the pupils dilated; and, finally, a deep and mortal coma is inevitable unless fortunate succour arrive.—*Treatment.* The body is neither to be transported into a heated place, nor immediately are warm substances to be applied; for strong re-action would, perhaps, exhaust the remaining vitality. Again, the rapid return of circulation to the surface, and the dilitation of the tissues, owing to sudden transition from cold and condensed to warm and rarefied air, produce shooting pains, dysphœa, suffocation, and even death itself. Numerous are the instances of travellers who, greatly suffering from cold, have perished from immediate exposure to a large fire, whilst those that have taken opposite means have been preserved. No state of asphyxia, however apparently complete, can justify the neglect of aids appropriate to the excitation of vitality. Individuals long buried under snow oftener recover than those do who have been exposed to the air. Curious cases of such recoveries are to be found in the Bibliotheca Britannica, the old Journal de Medecine, and the Memoirs of the Academy of Stockholm. The body should be quickly stripped, laid on a hard surface, and placed where there is no current of air, and where the temperature is a little above that of the atmosphere. Frictions with some exciting tincture are to be made on the præcordial region and umbilicus, and followed by the application of warm coverings. Afterwards the use of snow, iced water, and water successively less cold is to be employed. This first operation ought to continue nearly fifteen minutes; next, water a little warmed, and ultimately, luke-warm and hot water. When circulation and respiration are sensibly restored, when the muscles lose something of their inflexibility, and a little heat is manifested, the body must be quickly wiped with dry linen, subjected to dry frictions with flannel, and wrapped in a woollen blanket. Irritation of the nostrils, rude frictions with a brush dipped in vinegar on the hands and feet, brandy, wine, enemeta, rich broths, and medical stimuli claim attention. When the vital heat is uniformly established, and the chest dilates itself well, and the motions of the heart are strong and regular, exciting drinks must be interdicted to guard against morbid re-action, fever or inflammation. A slight moisture should be maintained on the skin, and the first solid food ought to be light and restorative. Cold produces the fatal effects enumerated whether above or below 0°. Moderate cold continued causes the same consequences as severe cold of short duration. Cold sometimes acts like opium, inflicts a

deadly stroke on contractility and sensibility, directly benumbs the central system, and the irritability of the heart. Prosper Alpinus, in his work, "*De Presagienda. Vita et Morte*," has promulgated similar opinions. As the action of cold is commonly slow, and the exposure of a few hours duration produces death, the calibre of the vessels diminishes, and repels the blood towards the cavities of the head, thorax and abdomen. The consequences are an obstruction in the pulmonary circulation, and venous system of the brain, which disturbs the functions of that organ, and induces somnolency. These statements are corroborated by the flowing of blood from the nose and ears and lungs, unnatural redness of the viscera, engorgements of the cerebral vessels, and sanguinneous effusions. It would seem that cold sometimes causes excitation of the brain which may prove mortal. Battie* saw a man who became maniacal after exposure to very rigorous cold, and Boerhaave† mentions a coachman, that died of cold, in whom there was inflammation of the brain, particularly of the right hemisphere, which adhered to the dura mater by a false membrane.

6. *The Application of Cold to Hygeia.* Cold acts on man, 1st, By a tonic property direct, derived from vital re-action; 2dly, By a tonic property indirect, resulting from abstraction of stimulus, or prevention of excessive diffusion and dissipation of organic activity. The former occurs in winter, and the latter in summer. In regard to therapeutics, cold may be considered under the heads of air, bathing, drinks, and aliments. Here the author's observations are judicious, but well known, and need not be farther entered into, since they are only subsidiary to practical medicine, and to the common occasions of life. The effects of cold air and bathing, cold drinks and aliments cannot be deemed desiderated information in an age so enlightened.

7. *Therapeutical Properties of Cold.* Cold, as a curative agent, has fixed the attention of ancient and modern physicians. Melampus, who, at his return from Egypt, introduced the use of the cold bath amongst the Greeks, may be named as the first, and likewise Erasistratus, Musa, Hippocrates, Avicenna, Celsus and Galen. An

*See his Aphorisms.

†Comment. Lipsiens. vol. 1. pars. 1. p. 232.

"attentive and elaborate analysis has led" the author to distinguish and determine upon seven therapeutical properties of cold; namely, 1. A refrigerating property; 2. An exciting; 3. A sedative; 4. An astringent; 5. A tonic; 6. A debilitating; and, 7. A perturbing property.—1. *Refrigerating property.* This is sufficiently shown during fevers and inflammations, where the skin is hot and dry, the eyes sparkling, the lips parched, the breath hot and fetid, the pulse hard, the thirst intense, and where cold, internally and externally administered, acts like a charm, and induces perspiration, tranquility and sleep.—2. *Exciting Property.* From this animal and organic life receive a shock that renders them more active, and occasionally overcomes insensibility and torpor—*e. g.* syncope, asphyxia, the hysteric paroxysm, cold affusions to the head, or ice to the eyes, forehead, temples, or back of the neck. Thus the washing of the lower half of the body with iced water, frictions with snow or ice on the sacrum, or pubes and perineum, have been successful in palsy of the bladder, and incontinence of urine from debility. The washing of the abdomen with cold water excites the peristaltic motion of the intestines, and produces evacuations, while the same effects have resulted from cold water thrown on the belly and limbs.—3. *Sedative property.* Cold enjoys a sedative effect very different from its debilitating one, for the first operates by merely diminishing excessive sensibility, while the second is exercised on, and destroys all the vital properties. A few simple facts will prove this sedative power of cold. The exhalation of sensibility in the phayrnx, œsophagus, and stomach, caused by pungent food and drinks, &c. is allayed by cold water, as well as the keen thirst of wounded persons after operations, and which is only the result of nervous irritation. An enema of cold water lulls the feeling of pungent heat, and the painful gripings of hypercatharsis. The application of iced water subdues spasm. In diseases marked by increased sensibility, cold acts like the most potent narcotics; and the bath and fomentations are the most useful forms. 4. *Astringent property.* This is evinced by cold producing an internal fibrous contraction in living tissues. This occurs only in the sick, where debility is not considerable. The employment of cold as an astringent removes looseness of the skin, cures or relieves relaxation of the sacro-sciatic ligaments, emphysema, relaxations, particularly of the scrotum, penis, and labia, prolapsed vagina, uterus and rectum. Simple washing with cold water arrests slight hæmorrhages, and benefits thrombus, and bloody tumours from contusion.—

5. *Tonic property.* The body or a part is strengthened by cold applications which provoke re-action. Cold overcomes original weakness, and invigorates the frame. The number of diseases benefitted by the agency of cold is well known to the most cursory observer.—6. *Debilitating property.* Cold is one of the most potent debilitants in therapeutics. Abstraction of caloric, universal constrictive spasm, diminution of sensibility and contractility to the last degree, are its principal destructive efforts. Yet still cold as a debilitant may be advantageously used in one class of diseases, and the ends to be attained by it are, 1st, To diminish excessive vital action, local and general, to lower the excitation of all the vital properties, and to restore them to their accustomed healthy condition. 2dly, To reduce them to a suitable degree that the disorder may follow a safe and regular march. 3dly, To produce a judicious exhaustion of the constitutional powers to prevent their extraordinary developement, or a recurrence to their probable exaltation. Cold applications, improperly applied, act externally and internally; first, they weaken the part, then, the effect extends, by continuity and sympathy, over the whole frame, and besides other obvious mischiefs, they sometimes cause inflammation to terminate in gangrene.—7. *Perturbing property.* This depends on sensation and brisk spasm. The strong and unusual impression of cold excites general surprise, and produces over the whole sensitive system a sudden shock which modifies its condition. Hence its capability of breaking through the continuity or periodicity of certain nervous movements; and in this way it is to be considered as antispasmodic, whether acting immediately or by sympathy. In the latter case, the perturbation is a repulsive excitement, and destroys the movements existing elsewhere. Spasms yield to sudden cold: cold water removes hiccup: iced water enemata have subdued convulsions: ices have cured hysterical women of palpitations, and imminent suffocations. Affusion of cold water on the head has been beneficial in certain cases of the vertigo, and obstinate head-achs. Immersion by surprise has successfully treated intermittent mania. Thus are cold applications useful in active hæmorrhages that depend essentially on the nervous system.

8. *Refrigerants.* Every substance, solid or fluid, simple or mixed, which, when applied to any surface, whether internal or external produces all the effects of cold, is denominated refrigerant or frigorific. Under that general name shall be included, 1. *Cold Air.* The

use of this is manifest in inflammatory and febrile diseases, as well as for the purposes of health. *Common water.* This is the easiest way of applying cold, and its temperature can readily be graduated. Between 65° and 80° water is cool: it is called icy when extremely low, and little removed from the freezing point. Water may be brought to this state by a sufficient quantity of ice.—3. *Sea water*, which is colder in proportion than fresh. 4. *Cold mineral waters*, natural or artificial, chalybeate, saline, sulphurious, or acidulous.—5. *Snow or ice.* They are exhibited by apposition, friction, or as epithems, until completely liquefied. The ice should be pounded, and enclosed, like snow, in a linen bag or bladder three-fourths full. The degree of cold may be increased by the addition of three parts of kitchen salt, or three of sal ammoniac to eight parts of ice. Ice can be introduced into certain cavities, by deglutition, or other means. 6. *Mixture of neutral salts.* Desiccated muriate of soda, muriate of ammonia, nitrate of potass, the sulphate, phosphate, and carbonate of soda, and desiccated muriate of lime, are convenient for the production of cold. A bag of fine linen is to be filled with two of these salts quickly mixed and moistened with water. An intense cold is made by the admixture also of nitric or sulphuric acid with snow.—7. *Mercury.* This metal causes a lively feeling of cold, owing to the rapidity with which, like many other bodies, it abstracts caloric, and is, therefore, available to practical medicine. 8. *Ether.* Its rapid evaporation quickly carries away the principle of heat.—9. *Herbs.* Cold is applied internally and externally in different forms. The following are the principal: *Aliments.*—2. *Cold drinks* —3. *Ices.*—4. *Cold bath.*—5. *Immersion.*—6. *Pumping or douche.*—7. *Affusion.*—8. *Aspersion.*—9. *Fomentation.*—10. *Embrocation.*—11 *Lotion or washing.* Subjects like these are familiar to every student, and render comment superfluous.

9. *The Application of cold to Disease.* This is the longest chapter in the present work, and we hesitate not to say the least interesting and important, for it only names and comments on the various diseases, in which cold, in one form or other, either has, or is supposed to have, a beneficial operation. The information which such a chapter can impart will not be required by any intelligent reader, and to him that is the reverse it could be of little use, but as we have not yet indulged in a single extract, excepting the preface, it may be pardonable to offer a short one from this chapter, which will answer the

double purpose of displaying the manner in which M. Beaupre treats a medical subject, and indicating the power that his translator, Dr. Clendinning, possesses over the English language.

"Hæmoptysis in an hæmorrhagy in which the application of cold offers, at once, probability of success, and hazard of mischief. The irritation which causes and sometimes sustains it, may be exasperated and bring on pneumonia. However, when Hæmoptysis is considerable, and menaces the life of the patient, we must without delay recur to the means of arresting it. Of all, cold is the quickest and most effectual; it merely requires prudence in its application. The cases inserted by Renard in the Journ. de Med. 1771, show that he has repeatedly cured hæmoptysis, by having pieces of ice held in the mouth, and afterwards swallowed, and even by applying pounded ice on the chest and neck. Gervasius, in his Treatise on the Use of Water, recommends the application of sponges dipped in iced water, to the chest. M. Gallereux, physician at Tonnere, has inserted, in Sedillot's Journal, a very interesting case of hæmoptysis cured by cold drinks, in a weakly valetudinary of sixty. Besides the symptoms peculiar to hæmorrhage, which was abundant and alarming, there were lypothymia, pulse irregular and intermittent, subsultus tendinum. Prescription: pounded ice with sugar internally; bags of ice on the chest; ice on the hands; iced water on the arms; very low temperature of chamber; doors and windows open: the symptoms ceased and recurred three times; the recovery was complete. M. Sedillot subjoins to that case a fact from his own practice, showing the success he has obtained from cold in an analogous case. He had the patient constantly ventilated, and ordered a compress steeped in iced vinegar, or a bladder of pounded ice to the chest.

"Pediluvia by immersion simply, or affusion on the lumbar region, may also be employed. Iced drinks are given, rendered slightly acid or mucilaginous, or in an emulsion, and sweetened to the taste of the sick. When de Haen failed of arresting hæmoptysis by the means pointed out, he prescribed cold water internally. He states, that in one case he premised bleeding, and the patient recovered." 264.

We will conclude this analysis by recording on this page the opinions of Mr. Brodie, concerning the production of animal heat, and the operation of cold. Animal heat is in some way or other dependant upon the integrity of the functions of the nervous system; and, therefore, the absolute degree of cold which an animal can bear with impunity will, *cæteris paribus*, be determined by his capabilities of generating heat. Individuals long exposed to intense

cold do not endure a painful state, for they gradually lose their sensibility, become drowsy, and die as if by the effects of an opiate. Cold then acts in the following order.

1. It lessens the irritability, and impairs the functions of the whole nervous system.

2. It weakens the contractile powers of the muscles.

3. It causes contraction of the capillaries, and thus diminishes the superficial circulation, and stops the cutaneous secretion.

4. It probably destroys the principle of vitality equally in every part, and does not exclusively disturb the functions of any particular organ.

Those positions have been confirmed by experiment. Dr. Chassat states, that in an animal immersed in a cold bath, death may take place at 79° Fahr. (26 *Centig.*) although it may be sometimes cooled as low as 69° (17 *Cent.*) before the animal dies; but, *cæterus paribus*, the animal dies sooner as the cooling is more rapid. After death the blood is generally florid in aorta, so that the animal does not die of suffocation. The heart occasionally contracts feebly, after the muscular irritability of the limbs and intestines is nearly destroyed. The cerebral veins contain but little blood, and the ventricles only a small portion of fluid. Chassat's experiments coincide with Brodie's for he uniformly found the heart much distended with blood, and, as in syncope, scarlet blood occupied the left side of it.

Invariably the heart ceased to contract before the diaphragm. We have added the preceding information because it fills an obvious chasm in the present performance, and which chasm has not been obviated by the translator. We will still further explain what we mean. When a human being perishes from cold, it is interesting to ascertain how he dies, and what particular functions necessary to life first sink under that destructive agent. Do the functions of the lungs, or does the action of the heart stop first? If the functions of the lungs, then the sufferer expires, as they do under strangulation, drowning, and the inhalation of noxious airs; and the left side of the heart and aorta will display black and unoxygenized blood, which is inadequate to the prolonged stimulation of these parts, and injurious to the brain. But if the action of the heart fail first, as it does in syncope, the left side of that organ and its artery will contain scarlet or oxygenized blood. In the former instance inflation of the lungs would be a judicious step: in the latter a most absurd proceed-

ing. In the matter now under consideration we may, perhaps, safely conclude that intense cold slowly, yet certainly, affects the whole nervous system; that, in consequence, the irritability of the heart, and of every other muscular part, gradually fails; and that, finally, life departs with a simultaneous cessation of every function on which its continuance depends.

ORIGINAL INTELLIGENCE AND NOTICES.

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1. Hepatica Triloba.

This plant has been recently announced in the newspapers of the United States, as a remedy for pulmonary consumption; and having attracted, in some degree, the attention of the profession in the West, we are induced to appropriate to it a few pages.

The *Hepatica triloba*, of Willdenow, is the *Amemone hepatica* of Linnæus; before whose time it was denominated Hepaticum trifolium, and confounded with the natural order of Cryptogamic plants, called by Jessieu *Hepaticæ*, and by the English botanists, Liverworts. Hence the name Noble liverwort, by which it is known in the older works on the Materia Medica. Some of the Liverworts, as both their English and Latin names import, were once recommended in diseases of the liver;—doubtless from a fancied resemblance between their singular foliage and the lobes of the liver. It was probably the botanical mistake, of associating the plant under consideration, with the liverworts, that obtained for it the name which it now bears, and afforded the first presumption, that it possessed medicinal powers, adapted to the cure of hepatic diseases.

The *Hepatica Triloba* is a native of both Europe and the United States. In the West, it grows in shaded, damp and rocky situations, and preserves its leaves green through the winter. They arise from the root, are sustained on long hairy foot stalks, and each is cut into three broad but pointed lobes; which are downy underneath, entire on the edges, and of a tough and fleshy texture. The root is fibrous.

The earliest notice with which we have met, of the medicinal properties of this vegetable, is contained in Salmon's "*Complete English Physician or Druggist's Shop opened*"—printed in London in 1693. We transcribe it as a specimen of the Materia Medica of that period; though it must be confessed, that Dr. Salmon's book cannot be admitted among the classicks of the profession.

"*Epatica nobilis, Trifolia Simplex, Herba Trinitatis, Noble Liver-wort.* In the shops is, 1. *The Herb*, with its flowers, which seems to be temperate in quality, gently binding, cleansing the blood, and wonderfully strengthening the Liver; it opens obstructions both of the Liver and Spleen, provokes urine, cleanses the Reins and cures Ruptures. 2. *A distilled water of the whole plant.* 3. *Essence of the juice with the spirit of wine.* 4. *A syrup of the juice.* 5. *A saline Tincture.*"

The compilers of the Edinburgh Medical and Physical Dictionary, 1807, inform us, that it "possesses mildly astringent and corroborant virtues; with which intentions infusions of it have been drank as tea, or the powder of the dry leaves given to the quantity of half a spoonful at a time. It is now however much neglected."

The authors of the *Dict. de Sciences Medicales*, merely observe that "Simon Pauli has advised the distilled water of the *Anemone Hepatica*, for the removal of freckles."

These authorities establish but little in favor of the active qualities of the *Hepatica triloba*, and in the Materia Medica, as in Jurisprudence, every plant should be presumed inert or innocent, until it is proved to be otherwise. But, to continue a pardonable simile, there are *circumstances* which should fix upon it the suspicion of possessing active powers. We allude to its botanical associations.

The *Hepatica Tribola* belongs to the natural order *Ranunculaceæ* of Jussieu, nearly all of which possess much activity, while many of them are actually deleterious. On this subject a short extract from the *Essai sur les Proprietes Medicales des Plants*, of M. De Candolle, may not be without its utility, as so many plants of this natural family are indigenous to the United States; and we shall, therefore, translate from that work the following paragraphs.

"Nearly all the plants, of this natural family, are acrid, and in some of them, the deleterious property is so energetic, that they are real poisons. The caustic principle appears to be of a peculiar nature. In most of the species it is so volatile, that boiling, or even simple drying in the air, is sufficient to destroy it.

It is neither acid nor alkaline; acids, honey, sugar, wine, alcohol, &c. increase its activity, and it is not, really, destroyed but by water. These singular characters are found, according to Krapfen, in a great number of species of the genus Ranunculus, of Linnæus; such as the *R. bulbosus*, *R. sceleratus*, *R. acris*, *R. arvensis*, *R. thora*, *R. illyricus*, *R. alpestris*, *R. flammula*, &c. This extractive principle appears to exist also in all the Hellebores, Clematites, Aconitums, and Anemones; of which the juice of the leaves and stem, appears to be endowed

with a similar causticity. Nearly all the plants of this natural order have been charged with being poisonous to brute animals; as the hellebores, virgin's bowers, meadow rues, &c. in Europe; and the *Anemone trilobata et triternata* in America. The distilled water of the *Ranunculus flammula et lingua* is an excellent emetic; and the leaves of a great number of associate species, when externally applied, are capable of acting as rubefacients, irritants, or vesicatories. Thus in the West Indies they raise blisters with the *R. Acris*, and, successfully, apply to the wrists, in the form of paste or cataplasm, the leaves of the *R. acris, bulbosus et sceleratus*, when treating obstinate agues. The leaves of the *Clematis recta et flammula* are used by beggars to excite artificial ulcers; and have been employed in the treatment of certain cutaneous diseases; those of the *Knowltonia vesicatoria* are used as epispasticks, in southern Africa; and those of the *Anemone nemorosa* are employed for a similar purpose in gout and rheumatism. Dr. Barton has observed that the *Ranunculuses*, and, especially, the *R. bulbosus*, applied externally, produce an excitation less lively, but more durable, than that of cantharides. Many other species of the same genus are used, internally, either as stimulants, or powerful sudorifics; as for example the *R. glacialis*, employed for this purpose by the inhabitants of the Alps of Dauphiny; the *Aconitum napellus, and Cammarum*, administered as diuretics; and the *Clematis recta* applied as an irritant."

But to return to our medicine. Several persons in this city, labouring under pulmonary affections, are at present using a decoction of the *Hepatica triloba*, or liverwort; and their testimony, so far, seems to be in its favour, as a palliative for cough and dyspnœa. One of our observing medical friends, who has taken it, personally, for some time, informs us, that its diuretic effect is very considerable; and, perhaps, it is on this operation that its pectoral virtues depend; for nearly every medicine that has done good, in chronic diseases of the lungs, is a diuretic. In support of this proposition we may cite digitalis, colchicum, and the balsam copaiva.

For ourselves, we have thought the present notice excusable, if not interesting; though we must own, that our faith in the powers of the *Hepatica*, is as feeble, as the *sensible* qualities of the plant.

Should any of our brethren find in their trials of it, or in their pharmaceutical inquiries into its nature, any thing worth communicating to the profession, we shall be pleased to give it publicity.

D.

2. Fœtal Monstrosity.

We have been favoured by Mr. William E. Thompson, student of medicine, with some account of a case of this kind, which occurred in April, 1827, in the practice of Dr. J. L. Houston, of Pendleton county, Kentucky.

The monster presented the union of two fœtuses. It had two perfect heads and two necks; but the right side of the body of one, was blended with the left side of the other. There were two perfect arms, one on each side of this common trunk. A third arm issued from the median line of the trunk, behind, at the scapulæ, and had two hands attached to it. The lower extremities followed the same law. Each side had a leg and foot, and from the lower part of the trunk behind, there issued a third, or common leg, which, however, had but one foot, and that was imperfect. There were two spinal columns,—one umbilicus, one anus, and one imperfect pudendum. Its weight was twelve pounds. It was still born. Unfortunately, no examination of the internal parts was permitted.

The delivery of this monster was not attended with any particular difficulty. The feet presented. The mother recovered without any sinister symptoms. D.

3. Medical Convention of Ohio.

In our first number, we spoke of the state Medical Convention, which, under the law regulating the practice of physic, in Ohio, was to assemble at Columbus, the seat of government, in December. Accordingly, on the 10th of that month, Delegates from 20 out of the 22 districts of the state assembled, and the Convention was organized. The following is a catalogue of the names of the gentlemen composing this respectable body, recorded in the order of the districts which they represented:—Doctors John Woolley, John C. Dunlavy, Joshua Martin, John G. Telford, G. Norton, Jacob Kirby, Reuben P. Mann, proxy for Dr. Carter, William Fullerton, Samuel Parsons, John Cotton, Robert McNeill, Daniel Tilden, Thomas Flanner, Anderson Judkins, George McCook, Peter Allen, B. B. Clark, J. H. Mathews, J. J. Price, Thomas Carrol. The 7th and 9th districts were not represented. Dr. John Woolley, of Cincinnati, was elected President, and Dr. Thomas Flanner, of Zanesville, Secretary.

The number of topics brought before the Convention was not great, and we shall notice but one—the project of establishing a

state Medical Society. By the law under which the Convention assembled, it was authorized to form the constitution of such a society, and very properly, as we conceive, resolved on exercising its discretionary power.

The Constitution, as published, declares, that there shall be two classes of members—representative and honorary. The former are to be chosen, one from each district, on the last Tuesday of May; and to hold their places, one half for two, the other, for four years. The honorary members are to be elected by the society itself. The first meeting is to be held on the first Monday of January, 1829, and the subsequent meetings are to be every other year. The officers shall be a President, Vice President, Secretary, and Treasurer. At the close of each meeting a discourse shall be delivered by some member appointed for that purpose.

The acknowledged necessity for laws to regulate the practice of medicine,—the great geographical extent of Ohio,—and the still greater diversity in manners, customs, and modes of thinking in different parts of the state, call loudly for a free interchange of sentiment among its physicians, on every thing which concerns their relations with each other, and with society. We consider it a matter of congratulation, therefore, that a state society is to be instituted; and indulge the hope, that its labours will contribute equally to the respectability of the profession, and the benefit of the community.

D.

4. Cincinnati Eye Infirmary.

This public charity, which we have twice taken the liberty of presenting to the notice of our readers, has received from the Legislature of Ohio a law of incorporation. One of its provisions is, that the Surgeon of the Infirmary shall give personal attendance gratuitously, to all paupers afflicted with diseases of the eye, who may be sent and supported, in Cincinnati, by the Ovesreers of the poor of the different townships of the state. Another, that the Visitors shall make a report to the General Assembly, at the close of every calendar year, on the state and progress of the establishment.

The officers appointed in the law are the following, who hold their places for an indefinite period.

Visitors.—Joshua L. Wilson, Davis B. Lawler, William M. Walker, William Burke, Martin Baum, John P. Foote, Peyton S. Symmes, Joseph S. Benham, Jacob Burnet, Lewis Howell, James A. Ranaldson, John Locke.

Surgeon—Daniel Drake, M. D. D.

5. Epidemic Quackery.

The influenza is said to spread from East to West. This has certainly been the case, whenever it appeared in the United States, for the last quarter of a century. Another public malady, of more obvious origin, has followed the same law of dissemination, and is now reigning among us. Two years ago we heard of its appearance on the eastern borders of this "Interior region," but hoped that it would not find among our people such a *predisposition*, as would enable it to spread. This hope was illusory, for it has at length reached the City of the West, and its power has been felt.

We allude to the patent and potent quackeries of one Thompson; said to be an inhabitant of the state of New-York. That many respectable citizens of Ohio have purchased the right of inflicting them on their unoffending and credulous fellow mortals, is a fact, which can neither be denied nor defended. They deserve, indeed, the severest censure, and it must and will overtake them.

The means with which these patentees undertake to vanquish the many ills that "flesh is heir to," have not been made known to us in their full extent; but steam, the *Lobelia inflata*, and Cayenne pepper are said to be a part.

These are active agents, the powers of which are well known to the profession,—who cannot be at a loss to estimate the mischiefs, which must of necessity result from their indiscriminate administration. We have been assured, that they were lately employed in this city, upon a young man afflicted with acute enteritis, whom, of course, they despatched in the most summary manner.

We feel it our duty to protest in the strongest terms against these depredations upon the health and lives of an unoffending community, and beg leave respectfully to exhort our brethren, and all intelligent, benevolent and influential citizens, to unite in such a sentence of condemnation, us may banish from our borders this organized system of mischievous quackery. D.

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6. Obituary Notice.

DIED—On the 1st inst. Dr. John Sellman, aged 64, a native of the state of Maryland, but for 35 years an inhabitant of the West; to which he came in the capacity of Surgeon's mate in one of the Regiments of Wayne's Army. He had resided longer in Cincinnati than any other physician of the city. Dr. Sellman was a judicious medical practitioner, and a courteous and gentlemanly man. D.